



Curriculum Vitae

Personal information **Filip Van Nieuwerburgh**

Work experience

1. Employer: Alcon
 - Start date: 012000
 - End date: 082002
 - Position: Validation / Project Engineer
 - Activities:
 - Country: Belgium
2. Employer: Ghent University
 - Start date: 092002
 - End date:
 - Position: Prof.
 - Activities:
 - Country: Belgium

Education and training

1. Subject: Ghent University
 - Start date: 101995
 - End date: 061999
 - Qualification: Pharm.D.
 - Organisation:
 - Country: Belgium
2. Subject: Ghent University
 - Start date: 092002
 - End date: 022007
 - Qualification: Ph.D.
 - Organisation:
 - Country: Belgium

Additional information

Publications

Damiaan Denys, Filip Van Nieuwerburgh, Dieter Deforce, Herman Westenberg. Association between serotonergic candidate genes and specific phenotypes of obsessive compulsive disorder. *JOURNAL OF AFFECTIVE DISORDERS* 91 (1): 39-44 MAR 2006 Impactfactor (2006): 3.138; Ranking: 29/147, Q1 Filip Van Nieuwerburgh, Sofie Castelee, Lies Maes, Alain Goossens, Dirk Inzé, Jan Van Bocxlaer, Dieter Deforce. Quantitation of artemisinin and its biosynthetic precursors in *Artemisia annua* L. by high performance liquid chromatography electrospray quadrupole time of flight tandem mass spectrometry. *JOURNAL OF CHROMATOGRAPHY A* 1118 (2): 180-187 JUN 23 2006 Impactfactor (2006): 3.554; Ranking: 6/68, Q1 Damiaan Denys, Filip Van Nieuwerburgh, Dieter Deforce, Herman Westenberg. Association between the dopamine D 2 receptor TaqI A2 allele and low activity COMT allele with obsessive compulsive disorder in males. *EUROPEAN NEUROPSYCHO-PHARMACOLOGY* 16 (6): 446-450 AUG 2006. Impactfactor (2006): 3.794; Ranking: 19/147, Q1 Heleen Nailis, Tom Coenye, Filip Van Nieuwerburgh, Dieter Deforce, Hans Nelis. Development and evaluation of different normalization strategies for gene expression studies in *Candida albicans* biofilms by real time PCR. *BMC MOLECULAR BIOLOGY* 7: Art. No. 25 AUG 4 2006 Impactfactor (2006): 3.500; Ranking: 84/262, Q2 Damiaan Denys, Filip Van Nieuwerburgh, Dieter Deforce, Herman Westenberg. Prediction of response to Paroxetine and Venlafaxine by serotonin related genes in obsessive compulsive disorder. *JOURNAL OF CLINICAL PSYCHIATRY*, 2007 May;68(5):747-53 Impactfactor (2006): 5.533; Ranking: 6/94, Q1 Mado Vandewoestyne, David Van Hoofstat, Filip Van Nieuwerburgh, Dieter Deforce. Automatic detection of spermatozoa for laser capture microdissection. *INTERNATIONAL JOURNAL OF LEGAL MEDICINE*, 2009, Volume: 123, Issue: 2, Pages: 169-175 Impactfactor (2009): 2.793; Ranking: 1/11, Q1 Filip Van Nieuwerburgh, Dominic Stoop, Patrick Cabri, Marc Dhont, Dieter Deforce, Petra De Sutter. Shorter CAG repeats in the androgen receptor gene may enhance hyperandrogenicity in polycystic ovary syndrome. *GYNECOLOGICAL ENDOCRINOLOGY*, 2008, Volume: 24, Issue: 12, Pages: 669-673 Impactfactor (2008): 1.359; Ranking: 42/61, Q3 Filip Van Nieuwerburgh, Els Goetghebeur, Mado Vandewoestyne, Dieter Deforce. Impact of allelic drop-out on evidential value of forensic DNA profiles using RMNE. *BIOINFORMATICS*, 2009, Jan 15;25(2):225-9. Impactfactor (2009): 4.926; Ranking: 2/29, Q1 Filip Van Nieuwerburgh, Damiaan Denys, Herman Westenberg, Dieter Deforce. Response to serotonin reuptake inhibitors in OCD is not influenced by common CYP2D6 polymorphisms. *INTERNATIONAL JOURNAL OF PSYCHIATRY IN CLINICAL PRACTICE*, 2009, Volume: 13, Issue: 4, pages: 345-348 Impactfactor (2009): 0.500; Ranking: 103/117, Q4 Mado Vandewoestyne, David Van Hoofstat, Filip Van Nieuwerburgh, Dieter Deforce. Suspension fluorescence in situ hybridization (S-FISH) combined with automatic detection and laser microdissection for STR profiling of male cells in male/female mixtures *INTERNATIONAL JOURNAL OF LEGAL MEDICINE*, 2009, Volume: 123, Issue: 5, Pages: 441-447 Impactfactor (2009): 2.793; Ranking: 1/11, Q1 H. Katerberg, D.C. Cath, D.A.J.P. Denys, P. Heutink, A. Polman, F.C.W. Van Nieuwerburgh, D.L.C. Deforce, Z. Bochdanovits, A.J.L.M. van Balkom, J.A. den Boer. The role of the COMT Val158Met polymorphism in the phenotypic expression of Obsessive-Compulsive Disorder. *AMERICAN JOURNAL OF MEDICAL GENETICS PART B - NEUROPSYCHIATRIC GENETICS*, 2010, Volume: 153B, Issue: 1, Pages: 167-176 Impactfactor (2009): 3.481; Ranking: 35/117, Q2 Martien Kas, Cigdem Gelegen, Filip van Nieuwerburgh, Herman Westenberg, Dieter Deforce and Damiaan Denys. Compulsivity in mouse strains homologous with chromosomes 7p and 15q linked to Obsessive-Compulsive Disorder. *AMERICAN JOURNAL OF MEDICAL GENETICS PART B - NEUROPSYCHIATRIC GENETICS*, 2010, Volume: 153B, Issue: 1, Pages: 252-259 Impactfactor (2009): 3.481; Ranking: 35/117, Q2 Annemieke Smet, Filip Van Nieuwerburgh, Tom Vandekerckhove, An Martel, Dieter Deforce, Patrick Butaye, Freddy Haesebrouck. Complete nucleotide sequence of CTX_M_15 plasmids from clinical *Escherichia coli* isolates: insertional events of transposons and insertion sequences *PLoS ONE*, JUN 18 2010, Volume: 5, Issue: 6, Article Number: e11202 Impactfactor (2010): 4.411; Ranking: 12/86,

Q1 Joachim De Schrijver, Kim De Leeneer, Steve Lefever, Nick Sabbe, Filip Van Nieuwerburgh, Paul Coucke, Dieter Deforce, Jo Vandesompele, Sofie Bekaert, Jan Hellemans, Wim Van Criekinge. Analysing 454 sequences with a modular and database oriented pipeline using the Variant Identification Pipeline. BMC BIOINFORMATICS, MAY 20 2010, Volume: 11, Article Number: 269 Impactfactor (2010): 3.029; Ranking: 4/37, Q1 Filip C. W. Van Nieuwerburgh*, Lies Maes*, Yansheng Zhang*, Darwin W. Reed, Jacob Pollier, Sofie R. F. Vande Castele, Dirk Inze, Patrick S. Covello, Dieter L. D. Deforce and Alain Goossens. Dissection of the phytohormonal regulation of trichome formation and biosynthesis of the antimalarial compound artemisinin in *Artemisia annua* plants NEW PHYTOLOGIST, 2010, Volume: 189, Issue: 1, Pages: 176_189, Published online: 27 SEP 2010 Impactfactor (2010): 6.516; Ranking: 7/188, Q1 De Ceuleneer Marlies, De Wit Vanessa, Van Steendam Katleen, Van Nieuwerburgh Filip, Tilleman Kelly, Deforce Dieter Modification of citrulline residues with 2,3-butanedione facilitates their detection by liquid chromatography/mass spectrometry RAPID COMMUNICATIONS IN MASS SPECTROMETRY, JUN 15 2011, Volume: 25, Issue: 11, Pages: 1536_1542 Impactfactor (2011): 2.846; Ranking: 19/73, Q2 Flaherty Britt L., Van Nieuwerburgh F., Head Steven R., Golden James W. Directional RNA deep sequencing sheds new light on the transcriptional response of *Anabaena* sp strain PCC 7120 to combined nitrogen deprivation BMC GENOMICS, JUN 28 2011, Volume: 12, Article Number: 332 Impactfactor (2010): 4.206; Ranking: 2/160, Q1 Mado Vandewoestyne, Filip Van Nieuwerburgh, David Van Hoofstat, Dieter Deforce. Evaluation of three DNA extraction protocols for forensic STR typing after laser capture microdissection FORENSIC SCIENCE INTERNATIONAL: GENETICS, 2012 Mar;6(2):258_62. Epub 2011 Jul 2 Impactfactor (2011): 3.082; Ranking: 2/15, Q1 De Leeneer Kim, De Schrijver Joachim, Clement Lieven, Baetens Machteld, Lefever Steve, De Keulenaer Sarah, Van Criekinge Wim, Deforce Dieter, Van Nieuwerburgh Filip, Bekaert Sofie, Pattyn Filip, De Wilde Bram, Coucke Paul, Vandesompele Jo, Claes Kathleen, Hellemans Jan. Practical Tools to Implement Massive Parallel Pyrosequencing of PCR Products in Next Generation Molecular Diagnostics PLOS ONE, SEP 30 2011, Volume: 6, Issue: 9, Article Number: e25531 Impactfactor (2010): 4.411; Ranking: 12/86, Q1 Van Nieuwerburgh F, Soetaert S, Podshivalova K, Ay_Lin Wang E, Schaffer L, Deforce D, Salomon DR, Head SR, Ordoukhanian P. Quantitative Bias in Illumina TruSeq and a Novel Post Amplification Barcoding Strategy for Multiplexed DNA and Small RNA Deep Sequencing. PLOS ONE, Epub OCT 28 2011, Volume 6, Issue 10, Article Number: e26969 Impactfactor (2010): 4.411; Ranking: 12/86, Q1 Van Nieuwerburgh F, Thompson RC, Ledesma J, Deforce D, Gaasterland T, Ordoukhanian P, Head SR. Illumina mate_paired DNA sequencing_library preparation using Cre_Lox recombination. NUCLEIC ACIDS RESEARCH, Feb;40(3):e24. Epub 2011 Nov 29 Impactfactor (2010): 7.836; Ranking: 30/286, Q1 Lien Spans, Zeynep Kalender Atak, Filip Van Nieuwerburgh, Dieter Deforce, Evelyne Lerut, Stein Aerts and Frank Claessens. Variations in the exome of the LNCaP prostate cancer cell line PROSTATE, 2012 Sep 1;72(12):1317_27. Epub 2011 Dec 27 Impactfactor (2010): 3.377; Ranking: 13/69, Q1 Trees Lepez, Mado Vandewoestyne, Shahid Hussain, Filip van Nieuwerburgh, Kris Poppe, Brigitte Velkeniers, Jean Marc Kaufman, Dieter Deforce. Fetal microchimeric cells in the blood of patients with an autoimmune thyroid disease PLOS ONE, 2011;6(12) Impactfactor (2010): 4.411; Ranking: 12/86, Q1 Nienke C. C. Vulink, Herman G. M. Westenberg, Filip Van Nieuwerburgh, Dieter Deforce, Sjoerd B. A. H. A. Fluitman, Jantien S. C. Meinardi, Damiaan Denys. Catechol_O_methyltransferase gene expression is associated with response to citalopram in obsessive compulsive disorder International Journal of Psychiatry in Clinical Practice, 2012 Oct;16(4):277_83. Epub 2012 Mar 13 Impactfactor (2010): 0.427; Ranking: 117/129, Q4 Sarah De Keulenaer, Jan Hellemans, Steve Lefever, Jean_Pierre Renard, Joachim De Schrijver, Hendrik Van de Voorde, Mohammad Amin Tabatabaiefar, Filip Van Nieuwerburgh, Daisy Flamez, Filip Pattyn, Bieke Scharlaken, Dieter Deforce, Sofie Bekaert, Wim Van Criekinge, Jo Vandesompele, Guy Van Camp and Paul Coucke. Molecular diagnostics for congenital hearing loss including 15 deafness genes using a next generation sequencing platform BMC Medical Genomics, 2012 May 18;5:17 Impactfactor (2011): 3.693; Ranking: 43/157, Q2 Ilse Vandecandelaere, Nele Matthijs, Filip Van Nieuwerburgh, Dieter Deforce, Hans Nelis, Peter Vosters, Liesbet De Bus, Pieter Depuydt, and Tom Coenye. Assessment of microbial diversity in biofilms recovered from endotracheal tubes using culture dependent and independent approaches PLOS ONE, 2012, Volume: 7, Issue: 6, Article Number: e38401 Impactfactor (2011): 4.092; Ranking: 12/84, Q1 Van Nieuwerburgh F*, Van Neste C*, Van Hoofstat D and Deforce D. Forensic STR analysis using massive parallel sequencing FORENSIC SCIENCE INTERNATIONAL: GENETICS, 2012 Dec;6(6):810_8. Epub 2012 Apr 13. Impactfactor (2011): 3.082; Ranking: 2/15, Q1 Sarah van Ient, Jurgen Piet, Delphine Beekman, Arie van der Ende, Filip Van Nieuwerburgh, Patrik Bavoil, Garry Myers, Daisy Vanrompae, and Yvonne Pannekoek Full genome sequences of all 9 *Chlamydia psittaci* genotype reference strains. JOURNAL OF BACTERIOLOGY, December 2012 vol. 194 no. 24 6930_6931 Impactfactor (2011): 3.825; Ranking: 29/114, Q2 Mado Vandewoestyne, David Van Hoofstat, Aimée Franssen, Filip Van Nieuwerburgh, Dieter Deforce. Presence and potential of cell free DNA in different types of forensic samples FORENSIC SCIENCE INTERNATIONAL: GENETICS 7 (2013) 316_320 Impactfactor (2011): 3.082; Ranking: 2/15, Q1 Esther Hoste, Geertrui Denecker, Barbara Gilbert, Filip Van Nieuwerburgh, Leslie van der Fits, Bob Asselbergh, Riet de Rijcke, Jean_Pierre Hachem, Dieter Deforce, Errol Prens, Peter Vandenaabeele and Wim Declercq. Caspase_14 deficient mice are more prone to development of parakeratosis. JOURNAL OF INVESTIGATIVE DERMATOLOGY, 2013 Mar;133(3):742_50. doi: 10.1038/ijd.2012.350. Impactfactor (2011): 6.314; Ranking: 1/58, Q1 Anemieke Smet, Filip Van Nieuwerburgh, Jessica Ledesma, Bram Flahou, Dieter Deforce, Richard Ducatelle and Freddy Haesebrouck. Genome sequence of *Helicobacter heilmannii* sensu stricto ASB 1 isolated from the gastric mucosa of a kitten with severe gastritis GENOME ANNOUNCEMENTS, 2013 Jan/Feb, Volume 1, Issue 1, 1_2, e00033_12. Impactfactor (to be announced) Stewart SE, Yu D, Scharf JM, Neale BM, Fagermess JA, Mathews CA, Arnold PD, Evans PD, Gamazon ER, Osiecki L, McGrath L, Haddad S, Crane J, Hezel D, Illman C, Mayerfeld C, Konkashbaev A, Liu C, Pluzhnikov A, Tikhomirov A, Edlund CK, Rauch SL, Moessner R, Falkai P, Maier W, Ruhrmann S, Grabe HJ, Lennertz L, Wagner M, Bellodi L, Cavallini MC, Richter MA, Cook EH, Kennedy JL, Rosenberg D, Stein DJ, Hemmings SMJ, Lochner C, Azzam A, Chavira DA, Fournier E, Garrido D, Sheppard B, Umana P, Murphy DL, Wendland JR, Veenstra_VanderWeele J, Denys D, Blom R, Deforce D, Van Nieuwerburgh F, Westenberg HGM, Walitza S, Egberts K, Renner T, Miguel EC, Cappi C, Hounie AG, do Rosario MC, Sampaio AS, Vallada H, Nicolini H, Lanzagorta N, Camarena B, Delorme R, Leboyer M, Pató CN, Pató MT, Voyiakiak E, Heutink P, Cath DC, Posthuma D, Smit JH, Samuels J, Bienvu OJ, Cullen B, Fyer AJ, Grados MA, Greenberg BD, McCracken JT, Riddle MA, Wang Y, Coric V, Leckman JF, Bloch M, Pittenger C, Eapen V, Black DW, Ophoff RA, Strengman E, Cusi D, Turiel M, Frau F, Macciardi F, Gibbs JR, Cookson MR, Singleton A, Hardy J, Crenshaw AT, Parkin MA, Mirel DB, Conti DV, Purcell S, Nestadt G, Hanna GL, Jenike MA, Knowles JA, Cox N, Pauls DL Genome_wide Association Study of Obsessive Compulsive Disorder MOLECULAR PSYCHIATRY, 2013 Jul;18(7):788_98 Impactfactor (2011): 13.668; Ranking: 1/129, Q1 Hagen F, Ceresini PC, Polacheck I, Ma HS, Van Nieuwerburgh F, Gabaldon T, Kagan S, Pursall ER, Hoogveld HL, van Iersel LJJ, Klau GW, Kelk SM, Stougie L, Bartlett KH, Voelz K, Prysycz LP, Castaneda E, Lazera M, Meyer W, Deforce D, Meis JF, May RC, Klaassen CHW, Boekhout T Ancient dispersal of the human fungal pathogen *Cryptococcus gattii* from the Amazon rainforest PLOS ONE, 2013, Volume: 8, Issue: 8, Article Number: e77148 Impactfactor (2012): 3.730; Ranking: 7/56, Q1 Broeckx BJG, Coopman F, Verhoeven GEC, Van Haeringen W, van de Goor L, Bosmans T, Gielen I, Saunders JH, Soetaert SSA, Van Bree H, Van Neste C, Van Nieuwerburgh F, Van Ryssen B, Verelst E, Van Steendam K, Deforce D The prevalence of nine genetic disorders in a dog population from Belgium, the Netherlands and Germany PLOS ONE, 2013, Volume: 8, Issue: 9, Article Number: e74811 Impactfactor (2012): 3.730; Ranking: 7/56, Q1 Davis LK, Yu DM, Keenan CL, Gamazon ER, Konkashbaev AI, Derks EM, Neale BM, Yang J, Lee SH, Evans P, Barr CL, Bellodi L, Benarroch F, Berrio GB, Bienvu OJ, Bloch MH, Blom RM, Bruun RD, Budman CL, Camarena B, Campbell D, Cappi C, Silgado JCC, Cath DC, Cavallini MC, Chavira DA, Chouinard S, Conti DV, Cook EH, Coric V, Cullen BA, Deforce D, Delorme R, Dion Y, Edlund CK, Egberts K, Falkai P, Fernandez TV, Gallagher PJ, Garrido H, Geller D, Girard SL, Grabe HJ, Grados MA, Greenberg BD, Gross_Tsur V, Haddad S, Heiman GA, Hemmings SMJ, Hounie AG, Illmann C, Jankovic J, Jenike MA, Kennedy JL, King RA, Kremeyer B, Kurlan R, Lanzagorta N, Leboyer M, Leckman JF, Lennertz L, Liu C, Lochner C, Lowe TL, Macciardi F, McCracken JT, McGrath LM, Restrepo SCM, Moessner R, Morgan J, Muller H, Murphy DL, Naarden AL, Ochoa WC, Ophoff RA, Osiecki L, Pakstis AJ, Pató MT, Pató CN, Piacentini J, Pittenger C, Pollak Y, Rauch SL, Renner TJ, Reus VI, Richter MA, Riddle MA, Robertson MM, Romero R, Rosario MC, Rosenberg D, Rouleau GA, Ruhrmann S, Ruiz_Linares A, Sampaio AS, Samuels J, Sandor P, Sheppard B, Singer HS, Smit JH, Stein DJ, Strengman E, Tischfield JA, Duarte AVV, Vallada H, Van Nieuwerburgh F, Veenstra_VanderWeele J, Walitza S, Wang Y, Wendland JR, Westenberg HGM, Shugart YY, Miguel EC, McMahon W, Wagner M, Nicolini H, Posthuma D, Hanna GL, Heutink P, Denys D, Arnold PD, Oostra BA, Nestadt G, Freimer NB, Pauls DL, Wray NR, Stewart SE, Mathews CA, Knowles JA, Cox NJ, Scharf JM Partitioning the Heritability of Tourette Syndrome (TS) and Obsessive Compulsive disorder (OCD) Reveals Differences In Genetic Architecture. PLoS Genetics, 2013, Volume: 9, Issue: 10, Article Number: e1003864 Impactfactor (2012): 8.517; Ranking: 12/161, Q1 Christophe Van Neste, Mado Vandewoestyne, Wim Van Criekinge, Dieter Deforce* and Filip Van Nieuwerburgh*. My_Forensic_Loci_queries

(MyFLq) framework for analysis of forensic data generated by massive parallel sequencing FORENSIC SCIENCE INTERNATIONAL: GENETICS 9 (2014) 1_8 Impactfactor (2012): 3.861; Ranking: 1/16, Q1 Sandra Soetaert, Christophe Van Neste, Mado Vandewoestyne, Steven R Head, Alain Goossens, Filip Van Nieuwerburgh and Dieter Deforce. Differential transcriptome analysis of glandular and filamentous trichomes in *Artemisia annua* BMC Plant Biology 2013 Dec 20;13:220 Impactfactor (2012): 4.354; Ranking: 16/197, Q1 Laid Doudah, Lieven De Zutter, Filip Van Nieuwerburgh, Dieter Deforce, Hanne Ingmer, Olivier Vandenberg, Anne Marie Van den Abeele and Kurt Houf Presence and analysis of plasmids in human and animal associated *Acrobacter* species. PLOS ONE, 2014, Volume: 9, Issue: 1, Article Number: e58487 Impactfactor (2012): 3.730; Ranking: 7/56, Q1 Steven R. Head, H. Kiyomi Komori, Sarah A. LaMere, Thomas Whisenant, Filip Van Nieuwerburgh, Daniel R. Salomon and Phillip Ordoukhanian Library construction for next-generation sequencing: Overviews and challenges. Biotechniques, Vol. 56, No. 2, February 2014, pp. 61–77 Impactfactor (2012): 2.399; Ranking: 38/75, Q3 De Spiegelaere Ward, Malatinkova Eva, Lynch Lindsay, Van Nieuwerburgh Filip, Messiaen Peter, O' Doherty Una, Vandekerckhove Linos Quantification of integrated HIV DNA by repetitive sampling Alu_HIV PCR based on Poisson Statistics. Clinical Chemistry, 2014 Jun; 60(6):886_95. Impactfactor (2012): 7.192; Ranking: 1/32, Q1 Leen Timbermont, Lina De Smet, Filip Van Nieuwerburgh, Valeria R Parreira, Gonzalez Van Driessche, Freddy Haesebrouck, Richard Ducatelle, John Prescott, Dieter Deforce, Bart Devreese and Filip Van Immerseel Perfrin, a novel bacteriocin associated with netB positive *Clostridium perfringens* strains from broilers with necrotic enteritis. Veterinary Research, 2014 Apr 5;45:40 Impactfactor (2012): 3.828; Ranking: 1/143, Q1 Ilse Vandecandelaere, Filip Van Nieuwerburgh, Dieter Deforce, Hans Nelis, and Tom Coenye. Draft genome sequence of methicillin resistant *Staphylococcus epidermidis* strain ET_024, isolated from an endotracheal tube biofilm of a mechanically ventilated patient GENOME ANNOUNCEMENTS, 2014 May_Jun; 2(3): e00527_14 Impactfactor (to be announced) B.J.G. Broeckx, G. Verhoeven, F. Coopman, W. Van Haeringen, T. Bosmans, I. Gielen, S. Henckens, J.H. Saunders, H. van Bree, B. Van Ryssen, V. Verbeke, K. Van Steendam, F. Van Nieuwerburgh, D. Deforce. The effect of positioning, reason for screening and referring veterinarian on estimates of canine hip dysplasia prevalence VETERINARY JOURNAL, Volume: 201, Issue: 3, Pages: 378_384, Published: SEP 2014 Impactfactor (2012): 2.424; Ranking: 4/143, Q1 Pieter Glibert, Liesbeth Vossaert, Katleen Van Steendam, Stijn Lambrecht, Filip Van Nieuwerburgh, Fritz Offner, Thomas Kipps, Maarten Dhaenens, Dieter Deforce Quantitative Proteomics to Characterize Specific Histone H2A Proteolysis in Chronic Lymphocytic Leukemia and the Myeloid THP_1 Cell Line Int. J. Mol. Sci. 2014, 15(6), 9407_9421 Impactfactor (2012): 2.464; Ranking: 48/152, Q2 Bart Broeckx, Frank Coopman, Geert Verhoeven, Valérie Bavegems, Sarah De Keulenaer, Ellen De Meester, Filip Van Nieuwerburgh*, and Dieter Deforce* Development and performance of a targeted whole exome sequencing enrichment kit for the dog (*Canis Familiaris* Build 3.1). Nature Scientific Reports, Volume: 4, Article Number: 5597, Published: JUL 7 2014 Impactfactor (2012): 2.927; Ranking: 8/56, Q1 Van Nieuwerburgh Filip, De Keulenaer Sarah, De Schrijver Joachim, Vandesompele Jo, Van Crieckinge Wim, Coucke J Paul, Deforce Dieter Illumina sequencing of 15 deafness genes using fragmented amplicons. BMC Research Notes. 2014 Aug 9;7:509. doi: 10.1186/1756_0500_7_509. Impactfactor (xxx): TBE; Ranking: x/x , Qx Ellen Scheerlinck, Katleen Van Steendam, Mado Vandewoestyne, Trees Lepez, Veerle Gobin, Paulien Meert, Liesbeth Vossaert, Filip Van Nieuwerburgh, Ann Van Soom, Luc Peelman, Björn Heindryckx, Petra De Sutter, Maarten Dhaenens, Dieter Deforce Detailed method description for noninvasive monitoring of differentiation status of human embryonic stem cells. Analytical Biochemistry, Volume 461, 15 September 2014, Pages 60–66 Impactfactor (2012): 2.582; Ranking: 26/75, Q2 Filip Van Nieuwerburgh, David Van Hoofstat, Christophe Van Neste, Dieter Deforce Retrospective study of the impact of miniSTRs on forensic DNA profiling of touch DNA samples. Science & Justice, Volume 54, Issue 5, September 2014, Pages 369–372 Impactfactor (2013): 1.415; Ranking: 8/16, Q3 Marjan Steppe, Filip Van Nieuwerburgh, Griet Vercauteren, Filip Boyen, Venessa Eeckhaut, Dieter Deforce, Freddy Haesebrouck, Richard Ducatelle, Filip Van Immerseel Safety assessment of the butyrate-producing *Butyrivibrio parvulus* strain 25_3T, a potential probiotic for patients with inflammatory bowel disease, based on oral toxicity tests and whole genome sequencing. Food and Chemical Toxicology, Volume: 72, Pages: 129_137, Published: OCT 2014 Impactfactor (2013): 3.210; Ranking: 21/123, Q1 Heleen Van Acker, Evelien De Canck, Filip Van Nieuwerburgh, Andrea Sass, Dieter Deforce, Hans J Nelis, Tom Coenye The BCESM genomic region contains a regulator involved in quorum sensing and persistence in *Burkholderia cenocepacia* J2315. Future Microbiol. (2014) 9(7), 845–860 Impactfactor (2013): 3.819; Ranking: 27/119, Q1 Tom Hellebuyck, Katleen Van Steendam, Dieter Deforce, Mark Blooi, Filip Van Nieuwerburgh, Evelien Bullaert, Richard Ducatelle, Freddy Haesebrouck, Frank Pasmans, An Martel Autovaccination confers protection against *Devriesea agamarum* associated septicemia but not dermatitis in bearded dragons (*Pogona vitticeps*). PLOS ONE, Volume: 9, Issue: 12, Article Number: e113084, Published: DEC 5 2014 Impactfactor (2013): 3.534; Ranking: 8/55, Q1 Olivier Christiaens, Daan Delbare, Christophe Van Neste, Kaat Cappelle, Na Yu, Ruben De Wilde, Filip Van Nieuwerburgh, Dieter Deforce, Kris Cooreman, Guy Smagge Differential transcriptome analysis of the common shrimp *Crangon crangon*: special focus on the nuclear receptors and RNAi-related genes. General and Comparative Endocrinology, 212 (2015) 163_177 Impactfactor (2014): 2.470; Ranking: 74/128, Q3 Isabel Tessa Moses, Jacob Pollier, Qian Shen, Sandra Soetaert, James Reed, Marie-Laure Erfelinck, Filip C.W. Van Nieuwerburgh, Robin Vanden Bossche, Anne Osbourne, Johan M. Thevelein, Dieter Deforce, Kexuan Tang and Alain Goossens OSC2 and CYP716A14v2 Catalyze the Biosynthesis of Triterpenoids for the Cuticle of Aerial Organs of *Artemisia annua*. Plant Cell. Volume: 27, Issue: 1, Pages: 286_301, Published: JAN 2015 Impactfactor (2014): 10.529; Ranking: 4/204, Q1 Pieter Glibert, Paulien Meert, Katleen Van Steendam, Filip Van Nieuwerburgh, Dieter De Coninck, Lennart Martens, Maarten Dhaenens, Dieter Deforce Phospho_iTRAQ: Assessing Isobaric Labels for the Discovery and Large-Scale Comparative Quantitation of Phosphorylation Sites. Journal of Proteome Research, Volume: 14, Issue: 2, Pages: 839_849, Published: FEB 2015 Impactfactor (2014): 4.245; Ranking: 14/79, Q1 Christophe Van Neste, Yannick Gansemans, Dieter De Coninck, David Van Hoofstat, Wim Van Crieckinge, Dieter Deforce*, Filip Van Nieuwerburgh* Forensic massively parallel sequencing data analysis tool: Implementation of MyFLq as a standalone web_ and Illumina BaseSpace@_application. Forensic Science International: Genetics, Volume: 15, Pages: 2_7, Published: MAR 2015 Impactfactor (2014): 4.604; Ranking: 1/15, Q1 Mohammad Jakir Hosen, Filip Van Nieuwerburgh, Dieter Deforce, Ludovic Martin, Georges Leftheriotis, Anne De Paepe, Paul J. Coucke, Olivier M. Vanakker Efficiency of exome sequencing for the molecular diagnosis of Pseudoxanthoma Elasticum. Journal of Investigative Dermatology. Volume: 135, Issue: 4, Pages: 992_998, Published: APR 2015. Impactfactor (2014): 7.216; Ranking: 1/63, Q1 Marie-Alice Fraiture, Philippe Herman, Isabel Taverniers, Marc De Loose, Filip Van Nieuwerburgh, Dieter Deforce, Nancy H. Roosens Validation of a sensitive DNA walking strategy to characterise unauthorised GMOs using model food matrices mimicking common rice products. Food Chemistry. Volume 173, 15 April 2015, Pages 1259–1265 Impactfactor (2014): 3.391; Ranking: 8/123, Q1 Anna Koliopoulou, Filip Van Nieuwerburgh, Dimitrios J. Stravopodis, Dieter Deforce, Luc Swevers, Guy Smagge Transcriptome Analysis of *Bombyx mori* Larval Midgut During Persistent and Pathogenic Cytoplasmic Polyhedrosis Virus Infection. PLOS ONE, Volume: 10, Issue: 4, Article Number: e0126452, Published: APR 15 2015 Impactfactor (2014): 3.234; Ranking: 9/57, Q1 Ivan Meeus, Laurian Parmentier, Annelies Billiet, Kevin Maebe, Filip Van Nieuwerburgh, Dieter Deforce, Peter Vandamme, Felix Wäckers, Guy Smagge 16S rRNA amplicon sequencing demonstrates that indoor-reared bumblebees (*Bombus terrestris*) harbor a core subset of bacteria normally associated with the wild host. PLOS ONE, Volume: 10, Issue: 4, Article Number: e0125152, Published: APR 29 2015 Impactfactor (2014): 3.234; Ranking: 9/57, Q1 Helen Decluyre, Kim Heylen, Koen Sabbe, Björn Tytgat, Dieter Deforce, Filip Van Nieuwerburgh, Carl Van Colen, Anne Willems A doubling of microphytobenthos biomass coincides with a tenfold increase in denitrifier and total bacterial abundances in intertidal sediments of a temperate estuary. PLOS ONE, Volume: 10, Issue: 5, Article Number: e0126583, Published: MAY 11 2015 Impactfactor (2014): 3.234; Ranking: 9/57, Q1 Lieselot Deleye, Dieter De Coninck, Christodoulos Christodoulou, Tom Sante, Annelies Dheedene, Björn Heindryckx, Van Den Abbeel Etienne, Petra De Sutter, Björn Menten, Dieter Deforce*, Filip Van Nieuwerburgh* Whole genome amplification with SurePlex results in better copy number variation detection using Massively Parallel Sequencing data compared to Multiple Annealing and Looping Based Amplification Cycles (MALBAC). Nature Scientific Reports, Volume: 4, Article Number: 5597, Published 30 June 2015 Impactfactor (2014): 5.578; Ranking: 5/56, Q1 Eva Van Caenegem, Katrien Wierckx, Els Elaut, Ann Buysse, Alexis Dewaele, Filip Van Nieuwerburgh, Griet De Cuyper, Guy T'Sjoen Prevalence of Gender Nonconformity in Flanders, Belgium. Archives of Sexual Behavior, Volume: 44, Issue: 5, Pages: 1281_1287, Published: JUL 2015. Impactfactor (2014): 2.589; Ranking: Q1 Helmsmoortel C., Vandeweyer G., Ordoukhanian P., Van Nieuwerburgh F., Van der Aa N., Kooy RF. Challenges and opportunities in the investigation of unexplained intellectual disability using family based whole exome sequencing. Clinical Genetics, Volume: 88, Issue: 2, Pages: 140_148, Published: AUG 2015 Impactfactor (2014): 3.931; Ranking: 42/167, Q2 Bart Broeckx, Christophe Hitte, Frank Coopman, Geert Verhoeven, Sarah De Keulenaer, Ellen De Meester, Thomas Derrien, Jessica Alfoldi, Kerstin Lindblad-Toh, Tim Bosmans, Ingrid Gielen, Henri van Bree,

Bernadette Van Ryssen, Jimmy Saunders, Dieter Deforce*, Filip Van Nieuwerburgh* Improved canine exome designs, featuring ncRNAs and increased coverage of protein coding genes. *Nature Scientific Reports*, 5:12810 | DOI: 10.1038/srep12810, Published: AUG 3 2015 Impactfactor (2014): 5.578; Ranking: 5/57, Q1 Roel Haesendonck, Filip Van Nieuwerburgh, Freddy Haesebrouck, Dieter Deforce, Frank Pasmans, and An Martel Genome sequence of *Devriesea agamarum* isolated from agamid lizards with dermatitis. *Genome Announcements*, 2015 Aug 20;3(4) Impactfactor (2014): TBA Andrea M. Sass, Heleen Van Acker, Konrad U. Förstner, Filip Van Nieuwerburgh, Dieter Deforce, Jörg Vogel, Tom Coenye Genome_wide transcription start site profiling in biofilm_grown *Burkholderia cenocepacia* J2315 *BMC Genomics*, Volume: 16, Article Number: 775, Published: OCT 13 2015 Impactfactor (2014): 3.986; Ranking: 26/163, Q1 Lieselot Deleye, Annelies Dheedene, Dieter De Coninck, Tom Sante, Christodoulos Christodoulou, Björn Heindryckx, Etienne Van den Abbeel, Petra De Sutter, Dieter Deforce, Björn Menten*, Filip Van Nieuwerburgh* Shallow whole genome sequencing is well suited for the detection of chromosomal aberrations in human blastocysts. *Fertil Steril*, Volume 104, Issue 5, November 2015, Pages 1276–1285.e1 Impactfactor (2014): 4.590; Ranking: 2/30, Q1 Van Neste Christophe, Deforce Dieter*, Van Nieuwerburgh* Filip Effect of multiple allelic drop_outs in forensic RMNE calculations. *Forensic Science International: Genetics*, Volume 19, November 2015, Pages 243–249 Impactfactor (2014): 4.604; Ranking: 1/15, Q1 Aris Zografidis, Filip Van Nieuwerburgh, Anna Koliopoulou, Konstantinos Apostolou_Karampelis, Steven Head, Dieter Deforce, Guy Smagghe, and Luc Swevers Viral small RNA analysis of *Bombyx mori* larval midgut during persistent and pathogenic cytoplasmic polyhedrosis virus infection. *Journal of Virology*, Volume: 89, Issue: 22, Pages: 11473_11486, Published: NOV 2015 Impactfactor (2014): 4.439; Ranking: 7/33, Q1 Bart J. G. Broeckx, Frank Coopman, Geert Verhoeven, Tim Bosmans, Ingrid Gielen, Walter Dingemanse, Jimmy H. Saunders, Dieter Deforce* and Filip Van Nieuwerburgh* An heuristic filtering tool to identify phenotype_associated genetic variants applied to human intellectual disability and canine coat colors. *BMC Bioinformatics*, 2015 Nov 19;16:391. doi: 10.1186/s12859_015_0822_7 Impactfactor (2014): 2.576; Ranking: 11/57, Q1 Myrthe Joosten, Sara Lindén, Mirko Rossi, Alfred Tay, Emma Skoog, Medea Padra, Fanny Thiriot, Tim Perkins, Peter Vandamme, Filip Van Nieuwerburgh, Katharina D'Herde, Wim Van den Broeck, Bram Flahou, Dieter Deforce, Richard Ducatelle, Barry Marshall, Freddy Haesebrouck, and Annemieke Smet Divergence between the highly virulent zoonotic pathogen *Helicobacter heilmannii* and its closest relative, the low virulent *Helicobacter ailurogastricus* sp. nov. *Infection and Immunity*, Volume: 84, Issue: 1, Pages: 293_306, Published: JAN 2016 Impactfactor (2014): 3.731; Ranking: 23/78 , Q2 Van Neste Christophe, Wim Van Crieckinge, Deforce Dieter*, Van Nieuwerburgh Filip* Forensic Loci Allele Database (FLAD): automatically generated, permanent identifiers for sequenced forensic alleles. *Forensic Science International: Genetics*, 2016 Jan;20:e1_3 Impactfactor (2014): 4.604; Ranking: 1/15, Q1 Sonia Heras, Dieter I. M. De Coninck, Mario Van Poucke, Karen Goossens, Osvaldo Bogado Pascottini, Filip Van Nieuwerburgh, Dieter Deforce, Petra De Sutter, Jo L. M. R. Leroy, Alfonso Gutierrez_Adan, Luc Peelman and Ann Van Soom Suboptimal culture conditions induce more deviations in gene expression in male than female bovine blastocysts. *BMC Genomics*, Volume: 17, Article Number: 72, Published: JAN 22 2016 Impactfactor (2014): 3.986; Ranking: 26/163, Q1 Willems Sander; Fraiture Marie_Alice; Deforce Dieter; De Keersmaecker Sigrid; Herman Philippe; Van Nieuwerburgh Filip*; Roosens Nancy* Statistical relevance of Next_Generation Sequencing data for the detection of Genetically Modified Organisms in food and feed. *Food Chemistry*, Volume 192, 1 February 2016, Pages 788–798 Impactfactor (2014): 3.391; Ranking: 8/123, Q1 Annelies Billiet, Ivan Meeus, Filip Van Nieuwerburgh, Dieter Deforce, Wäckers Felix, Guy Smagghe Colony contact contributes to the diversity of gut bacteria in bumblebees (*Bombus terrestris*). *Insect Science*, Volume: 24, Issue: 2, Pages: 270_277, Published: APR 2017 15 FEB 2016. Impactfactor (2014): 2.144; Ranking: 12/92, Q1 Katrien Smits, Dieter I.M. De Coninck, Filip Van Nieuwerburgh, Jan Govaere, Mario Van Poucke, Luc Peelman, Dieter Deforce and Ann Van Soom The Equine Embryo Influences Immune Related Gene Expression in the Oviduct. *Biology of Reproduction*, 2016 Feb;94(2):36. Impactfactor (2014): 3.318; Ranking: 5/30, Q1 Gilles Brackman, Koen Breynne, Riet De Rycke, Arno Vermote, Filip Van Nieuwerburgh, Evelyn Meyer, Serge Van Calenbergh, Tom Coenye The Quorum Sensing Inhibitor Hamamelitannin Increases Antibiotic Susceptibility of *Staphylococcus aureus* Biofilms by Affecting Peptidoglycan Biosynthesis and eDNA Release. *Nature Scientific Reports*, 2016 Feb 1;6:20321. Impactfactor (2014): 5.578; Ranking: 5/57, Q1 Jinzhi Niu, Guy Smagghe, Dieter De Coninck, Filip Van Nieuwerburgh, Dieter Deforce, Ivan Meeus In vivo study of Dicer_2 mediated immune response of the small interfering RNA pathway upon systemic infections of virulent and avirulent viruses in *Bombus terrestris*. *Insect Biochemistry and Molecular Biology*, Volume: 70, Pages: 127_137, Published: MAR 2016 Impactfactor (2014): 3.450; Ranking: 2/92 , Q1 Isabel Snauwaert, Sanne Roels, Filip Van Nieuwerburgh, Anita Van Landschoot, Luc De Vuyst, Peter Vandamme Microbial diversity and metabolite composition of Belgian red_brown acidic ales. *International Journal of Food Microbiology*, Volume 221, 16 March 2016, Pages 1–11 Impactfactor (2014): 3.082; Ranking: 12/123, Q1 Bart Broeckx, Frank Coopman, Geert Verhoeven, Sarah De Keulenaer, Ellen De Meester, Valérie Bavegams, Pascale Smets, Bernadette Van Ryssen, Dieter Deforce* and Filip Van Nieuwerburgh* Towards the most ideal case_control design with related and unrelated dogs in whole exome sequencing studies. *Animal Genetics*, 2016 Apr;47(2):200_7 Impactfactor (2014): 2.207; Ranking: 3/57, Q1 Grant Stewart, Thomas Powles, Christophe Van Neste, Alison Meynert, Fiach O'Mahony, Alexander Laird, Dieter Deforce, Filip Van Nieuwerburgh, Geert Trooskens, Wim Van Crieckinge, Tim De Meyer, and David Harrison Dynamic epigenetic changes to VHL occur with sunitinib in metastatic clear cell renal cancer. *Oncotarget*, Volume: 7, Issue: 18, Pages: 25241_25250, DOI: 10.18632/oncotarget.8308, Published: MAY 3 2016 Impactfactor (2015): 5.008; Ranking: 36/213, Q1 Annelies Billiet, Ivan Meeus, Filip Van Nieuwerburgh, Dieter Deforce, Felix Wäckers, Guy Smagghe Impact of sugar syrup and pollen diet on the bacterial diversity in the gut of indoor_reared bumblebees (*Bombus terrestris*). *Apidologie*, Volume: 47, Issue: 4, Pages: 548_560, DOI: 10.1007/s13592_015_0399_1, Published: JUL 2016 Impactfactor (2014): 1.676; Ranking: 22/92, Q1 Lieselot Deleye, Dieter De Coninck, Annelies Dheedene, Petra De Sutter, Björn Menten, Dieter Deforce*, Filip Van Nieuwerburgh* Performance of a TthPrimPol_based whole genome amplification kit for copy number alteration detection using massively parallel sequencing. *Nature Scientific Reports*, Volume: 6, Article Number: 31825, DOI: 10.1038/srep31825, Published: AUG 22 2016 Impactfactor (2015): 5.525; Ranking: 7/63, Q1 Ellen Scheerlinck, Katleen Van Steendam, Simon Daled, Elisabeth Govaert, Liesbeth Vossaert, Paulien Meert, Filip Van Nieuwerburgh, Ann Van Soom, Luc Peelman, Petra De Sutter, Björn Heindryckx, Maarten Dhaenens, Dieter Deforce Assessing the impact of minimizing arginine conversion in fully defined SILAC culture medium in human embryonic stem cells. *Proteomics*, Volume: 16, Issue: 20, Pages: 2605_2614, DOI: 10.1002/pmic.201600174, Published: OCT 2016 Impactfactor (2015): 4.079; Ranking: 75/289, Q2 Farzaneh Ghazavi, Barbara De Moerloose, Wouter Van Loocke, Annelynn Wallaert, Hetty Helsmoortel, Alina Ferster, Marleen Bakkus, Geneviève Plat, Eric Delabesse, Anne Uyttebroeck, Filip Van Nieuwerburgh, Dieter Deforce, Nadine Van Roy, Frank Speleman, Yves Benoit, Tim Lamms, Pieter Van Vlierberghe Unique long non_coding RNA expression signature in ETV6/RUNX1 driven B_cell precursor acute lymphoblastic leukemia. *Oncotarget*, Volume: 7, Issue: 45, Pages: 73769_73780, DOI: 10.18632/oncotarget.12063, Published: NOV 8 2016 Impactfactor (2015): 5.008; Ranking: 43/187, Q1 Xiaohui Yan, Huiming Ge, Tingting Huang, Hindra, Dong Yang, Qihui Teng, Ivana Crnovic, Xiuling Li, Jeffrey D Rudolf, Jeremy R Lohman, Yannick Gansemans, Xiangcheng Zhu, Yong Huang, Li_Xing Zhao, Yi Jiang, Filip Van Nieuwerburgh, Christoph Rader, Yanwen Duan, Ben Shen Strain Prioritization and Genome Mining for Eneidyne Natural Products. *mBio*, Volume: 7, Issue: 6, Article Number: e02104, DOI: 10.1128/mBio.02104_16, Published: NOV_DEC 2016 Impactfactor (2015): 6.975; Ranking: 13/123, Q1 Christodoulos Christodoulou, Annelies Dheedene, Ilse De Croo, Björn Heindryckx, Lieselot Deleye, Filip Van Nieuwerburgh, Dieter Deforce, Petra De Sutter, Björn Menten and Etienne Van den Abbeel. Preimplantation genetic diagnosis for chromosomal rearrangements using array comparative genomic hybridization at the blastocyst stage. *Fertility and Sterility*, Volume: 107, Issue: 1, DOI: 10.1016/j.fertnstert.2016.09.045, Published: JAN 2017 Impactfactor (2015): 4.333; Ranking: 3/29, Q1 Sander Willems, Senne Cornelis, Yannick Gansemans, Bart Broeckx, Dieter De Coninck, Christophe Van Neste, Maarten Dhaenens, Dieter Deforce*, en Filip Van Nieuwerburgh*. RMNE calculation in forensic profiles with a high number of loci and allelic drop_outs using polynomial expansion. *Forensic Science International: Genetics*, Volume: 26, Pages: E14_E16, DOI: 10.1016/j.fsigen.2016.10.020, Published: JAN 2017 Impactfactor (2015): 4.988; Ranking: 1/15, Q1 Senne Cornelis, Yannick Gansemans, Lieselot Deleye, Dieter Deforce*, Filip Van Nieuwerburgh* Forensic SNP Genotyping using Nanopore MinION Sequencing. *Nature Scientific Reports*, Volume: 7, Article Number: 41759, DOI: 10.1038/srep41759, Published: FEB 3 2017 Impactfactor (2015): 5.525; Ranking: 7/63, Q1 Anneleen Parmentier, Ivan Meeus, Filip Van Nieuwerburgh, Dieter Deforce, Peter Vandamme, Guy Smagghe A different gut microbial community between larvae and adults of a wild bumblebee nest (*Bombus pascuorum*). *Insect Science*. In press Willems Sander, Dhaenens Maarten, Govaert Elisabeth, De Clerck Laura, Meert Paulien, Van Neste Christophe, Van Nieuwerburgh Filip*, Deforce Dieter* Flagging false positives following untargeted LCMS characterization of histone PTM combinations. *Journal of Proteome Research*, Volume: 16, Issue: 2, Pages: 655_664, Published: FEB 2017

Impactfactor (2016): 4.43; Ranking: 14/78, Q1 Steven Goossens, Sofie Peirs, Wouter Van Loocke, Mina Takawy, Stefan Sonderegger, Katharina Haigh, Thao Ngyuen, Niels Vandamme, Magdaline Costa, Catherine Carmichael, Filip Van Nieuwerburgh, Dieter Deforce, Oded Kleinfeld, David Curtis, Geert Bercx, Pieter Van Vlierberghe and Jody J. Haigh Oncogenic ZEB2 activation drives sensitivity towards LSD1 inhibition in T_h cell acute lymphoblastic leukemia. *Blood*, Volume: 129, Issue: 8, Pages: 981-990, Published: FEB 23 2017 Impactfactor (2016): 13.164; Ranking: 2/70, Q1 Ilse Vandecandelaere, Filip Van Nieuwerburgh, Dieter Deforce, Tom Coenye Metabolic activity, urease production, antibiotic resistance and virulence in dual species biofilms of *Staphylococcus epidermidis* and *Staphylococcus aureus*. *PLOS ONE*, Volume: 12, Issue: 3, Article Number: e0172700, Published: MAR 6 2017 Impactfactor (2016): 2.806; Ranking: 15/64, Q1 Sharat Warriar, Margot Van der Jeught, Galbha Duggal, Laurentijn Tilleman, Ella Sutherland, Jasin Taelman, Mina Popovic, Sylvie Lierman, Suzanna Chuva De Sousa Lopes, Ann Van Soom, Luc Peelman, Filip Van Nieuwerburgh, Dieter De Coninck, Björn Menten, Pieter Mestdagh, Jo Van de Sompele, Dieter Deforce, Petra De Sutter, Björn Heindryckx Direct comparison of distinct naïve pluripotent states in human embryonic stem cells. *Nature Communications*, Volume: 8, Article Number: 15055, Published: APR 21 2017 Impactfactor (2016): 12.124; Ranking: 3/64, Q1 Christophe Van Neste; Alexander Laird; Fiach O'Mahony; Wim Van Criekinge; Dieter Deforce; Filip Van Nieuwerburgh; Thomas Powles; David J Harrison; Grant D Stewart; Tim De Meyer Epigenetic sampling effects: nephrectomy modifies the clear cell renal cell cancer methylome. *Cellular Oncology*, Volume: 40, Issue: 3, Pages: 293-297, Published: JUN 2017 Impactfactor (2016): 3.786; Ranking: 14/79, Q1 Lieselot Delede, Laurentijn Tilleman, Ann_Sophie Vander Plaetsen, Senne Cornelis, Dieter Deforce, Filip Van Nieuwerburgh Performance of four modern whole genome amplification methods for copy number variant detection in single cells. *Nature Scientific Reports*, Volume: 7, Article Number: 3422, Published: JUN 13 2017 Impactfactor (2016): 4.259; Ranking: 10/64, Q1 Francesca Rovetto, Aurelien Carlier, Anne_Marie Van den Abeele, Koen Illegghems, Filip Van Nieuwerburgh, Luca Coccolin, Kurt Houf Characterization of the emerging zoonotic pathogen *Arcobacter* *thereius* by whole genome sequencing and comparative genomics. *PLOS ONE*, Volume: 12, Issue: 7, Article Number: e0180493, Published: JUL 3 2017 Impactfactor (2016): 2.806; Ranking: 15/64, Q1 Siele Ceuppens, Dieter De Coninck, Nadine Botteldoorn, Filip Van Nieuwerburgh, and Mieke Uyttendaele Microbial community profiling of fresh basil and pitfalls in taxonomic assignment of enterobacterial pathogenic species based upon 16S rRNA amplicon sequencing. *International Journal of Food Microbiology*, 257 (2017) 148-156, Published: SEP 18 2017 Impactfactor (2016): 3.339; Ranking: 13/130, Q1 Ann_Sophie Vander Plaetsen, Lieselot Delede, Senne Cornelis, Laurentijn Tilleman, Filip Van Nieuwerburgh*, Dieter Deforce* STR profiling and Copy Number Variation analysis on single, preserved cells using current Whole Genome Amplification methods. *Scientific Reports*, Volume: 7, Article Number: 17189, Published: DEC 7 2017 Impactfactor (2016): 4.259; Ranking: 10/64, Q1 Diana Aguilar_Ayala, Laurentijn Tilleman, Filip Van Nieuwerburgh, Dieter Deforce, Juan Palomino, Peter Vandamme, Jorge Gonzalez_Y_Merchand, and Anandi Martin The transcriptome of *Mycobacterium tuberculosis* in a lipid_rich dormancy model through RNAseq analysis. *Scientific Reports*, Volume: 7, Article Number: 17665, Published: DEC 15 2017 Impactfactor (2016): 4.259; Ranking: 10/64, Q1 Guohui Pan, Zhengren Xu, Zhikai Guo, H Hindra, Ming Ma, Dong Yang, Hao Zhou, Yannick Gansemans, Xiangcheng Zhu, Yong Huang, Li_Xing Zhao, Yi Jiang, Jin_hua Cheng, Filip van Nieuwerburgh, Joo Won Suh, Yanwen Duan, Ben Shen Discovery of the Leinamycin Family of Natural Products by Mining Actinobacterial Genomes. *PNAS*, Volume: 114, Issue: 52, Pages: E11131-E11140, Published: DEC 26 2017 Impactfactor (2016): 10.414; Ranking: 4/64, Q1 Lisa Slachmuylders, Heleen Van Acker, Gilles Brackman, Andrea Sass, Filip Van Nieuwerburgh, Tom Coenye Elucidation of the mechanism behind the potentiating activity of baicalin against *Burkholderia cenocepacia* biofilms. *PLOS ONE*, Volume: 13, Issue: 1, Article Number: e0190533, DOI: 10.1371/journal.pone.0190533, Published: JAN 2 2018 Impactfactor (2016): 3.394; Ranking: 15/64, Q1 Anneleen Parmentier, Ivan Meeus, Filip Van Nieuwerburgh, Dieter Deforce, Peter Vandamme, Guy Smagghe A different gut microbial community between larvae and adults of a wild bumblebee nest (*Bombus pascuorum*). *Insect Science*, Volume: 25, Issue: 1, Pages: 66-74, DOI: 10.1111/1744-7917.12381, Published: FEB 2018 Impactfactor (2016): 2.129; Ranking: 14/93, Q1 Sanne Kiekens, Andrea Sass, Filip Van Nieuwerburgh, Dieter Deforce, and Tom Coenye The small RNA ncS35 regulates growth in *Burkholderia cenocepacia* J2315. *mSphere*, Volume: 3, Issue: 1, Article Number: e00579-17, DOI: 10.1128/mSphere.00579-17, Published: JAN_FEB 2018 Impactfactor (2017): 3.575; Ranking: 38/125, Q2 Katrien Smits, Sander Willems, Katrien Van Steendam, Margot Van De Velde, Valérie De Lange, Cyrillus Ververs, Kim Roels, Jan Govaere, Filip Van Nieuwerburgh, Luc Peelman, Dieter Deforce, and Ann Van Soom Proteins involved in embryo_maternal interaction during the signalling of maternal recognition of pregnancy in the horse. *Scientific Reports*, Volume: 8, Article Number: 5249, Published: MAR 27 2018 Impactfactor (2016): 4.259; Ranking: 10/64, Q1 Sabitri Ghimire, Margot Van der Jeught, Jitesh Neupane, Matthias S. Roost, Jasper Anckaert, Mina Popovic, Filip Van Nieuwerburgh, Pieter Mestdagh, Jo Vandesompele, Dieter Deforce, Björn Menten, Susana Chuva de Sousa Lopes, Petra De Sutter, and Björn Heindryckx Comparative analysis of naive, primed and ground state pluripotency in mouse embryonic stem cells originating from the same genetic background. *Scientific Reports*, Volume: 8, Article Number: 5884, Published: APR 12 2018 Impactfactor (2016): 4.259; Ranking: 10/64, Q1 Delede Lieselot, Gansemans Yannick, De Coninck Dieter, Van Nieuwerburgh Filip*, Deforce Dieter* Massively parallel sequencing of micro_manipulated cells targeting a comprehensive panel of disease_causing genes: a comparative evaluation of upstream whole_genome amplification methods. *PLOS ONE*, Volume: 13, Issue: 4, Article Number: e0196334, Published: APR 26 2018 Impactfactor (2016): 3.394; Ranking: 15/64, Q1 Bogaerts, E., Van der Vekens, E., Verhoeven, G., de Rooster, H., Van Ryssen, B., Samoy, Y., Putcuypis, I., Van Tilburg, J., Devriendt, N., Weekers, F., Bertal, M., Houdellier, B., Scheemaeker, S., Verstecken, J., Lamerand, M., Feenstra, L., Peelman, L., Nieuwerburgh, F.V., Saunders, J.H., Broeckx, BJG Intra_ and interobserver agreement on the radiographical diagnosis of canine cranial cruciate ligament rupture. *Veterinary Record*, Volume: 182, Issue: 17, Pages: 484+, Published: APR 2018 Impactfactor (2017): 2.05; Ranking: 16/140, Q1 Antilla Vermeri, Bulik_Sullivan Brendan, Finucane Hilary K., Walters Raymond K., Bras Jose, Duncan Laramie, Escott_Price Valentina, Falcone Guido J., Gormley Padhraig, Malik Rainer, Patsopoulos Nikolaos A., Ripke Stephan, Wei Zhi, Yu Dongmei, Lee Phil H., Turley Patrick, Grenier_Boley Benjamin, Chouraki Vincent, Kamatani Yoichiro, Berr Claudine, Letenneur Luc, Hannequin Didier, Amouyel Philippe, Boland Anne, Deleuze Jean_Francois, Duron Emmanuelle, Vardarajan Badri N., Reitz Christiane, Goate Alison M., Huentelman Matthew J., Kamboh M. Ilyas, Larson Eric B., Rogava Ekaterina, St George_Hyslop Peter, Hakonarson Hakon, Kukull Walter A., Farrer Lindsay A., Barnes Lisa L., Beach Thomas G., Demirci F. Yesim, Head Elizabeth, Hulette Christine M., Jicha Gregory A., Kauwe John S. K., Kaye Jeffrey A., Leverenz James B., Levey Allan I., Lieberman Andrew P., Pankratz Vernon S., Poon Wayne W., Quinn Joseph F., Saykin Andrew J., Schneider Lon S., Smith Amanda G., Sonnen Joshua A., Stern Robert A., Van Deerlin Vivianna M., Van Eldik Linda J., Harold Denise, Russo Giancarlo, Rubinsztein David C., Bayer Anthony, Tsolaki Magda, Proitsi Petra, Fox Nick C., Hampel Harald, Owen Michael J., Mead Simon, Passmore Peter, Morgan Kevin, Noethen Markus M., Rossor Martin, Lupton Michelle K., Hoffmann Per, Kornhuber Johannes, Lawlor Brian, McQuillin Andrew, Al_Chalabi Ammar, Bis Joshua C., Ruiz Agustin, Boada Merce, Seshadri Sudha, Beiser Alexa, Rice Kenneth, van der Lee Sven J., De Jager Philip L., Geschwind Daniel H., Riemenschneider Matthias, Riedel_Heller Steffi, Rotter Jerome I., Ransmayr Gerhard, Hyman Bradley T., Cruchaga Carlos, Alegret Montserrat, Winsvold Bendik, Palta Priti, Farh Kai_How, Cuenca_Leon Ester, Furlotte Nicholas, Kurth Tobias, Ligthart Lannie, Terwindt Gisela M., Freilinger Tobias, Ran Caroline, Gordon Scott D., Borck Guntram, Adams Hieab H. H., Lehtimäki Terho, Wedenoja Juho, Buring Julie E., Schuerks Markus, Hrafnisdóttir Maria, Hottenga Jouke_Jan, Penninx Brenda, Artto Ville, Kaunisto Mari, Vepsäläinen Salli, Martin Nicholas G., Montgomery Grant W., Kurki Mitja I., Hamalainen Eija, Huang Hailiang, Huang Jie, Sandor Cynthia, Webber Caleb, Muller_Myhsok Bertram, Schreiber Stefan, Salomaa Veikko, Loehrer Elizabeth, Goebel Hartmut, Macaya Alfons, Pozo_Rosich Patricia, Hansen Thomas, Werge Thomas, Kaprio Jaakko, Metspalu Andres, Kubisch Christian, Ferrari Michel D., Belin Andrea C., van den Maagdenberg Arn M. J. M., Zwart John_Anker, Boomsma Dorret, Eriksson Nicholas, Olesen Jes, Chasman Daniel I., Nyholt Dale R., Avbersek Andreja, Baum Larry, Berkovic Samuel, Bradfield Jonathan, Buono Russell, Catarino Claudia B., Cossette Patrick, De Jonghe Peter, Depondt Chantal, Dlugos Dennis, Ferraro Thomas N., French Jacqueline, Hjalgrim Helle, Jamnadas_Khoda Jennifer, Kalviainen Reetta, Kunz Wolfram S., Lerche Holger, Leu Costin, Lindhout Dick, Lo Warren, Lowenstein Daniel, McCormack Mark, Moller Rikke S., Molloy Anne, Ng Ping_Wing, Oliver Karen, Privitera Michael, Radtke Rodney, Ruppert Ann_Kathrin, Sander Thomas, Schachter Steven, Schankin Christoph, Scheffer Ingrid, Schoch Susanne, Sisodiya Sanjay M., Smith Philip, Sperling Michael, Striano Pasquale, Surges Rainer, Thomas G. Neil, Visscher Frank, Whelan Christopher D., Zara Federico, Heinzen Erin L., Marson Anthony, Becker Felicitas, Stroink Hans, Zimprich Fritz, Gasser Thomas, Gibbs Raphael, Heutink Peter, Martinez Maria, Morris Huw R., Sharma Manu, Rytten Mina, Mok Kin Y., Puliit Sara, Bevan Steve, Holliday Elizabeth, Attia John, Batey Thomas, Boncoraglio Giorgio, Thijs Vincent, Chen Wei_Min, Mitchell Braxton, Rothwell Peter, Sharma Pankaj, Sudlow Cathie, Vicente Astrid, Markus Hugh, Kourkoulis Christina, Pera Joana, Raffeld Miriam, Silliman Scott, Perica Vesna Boraska, Thornton Laura M., Huckins Laura M., Rayner N. William, Lewis

Cathryn M., Gratacos Monica, Rybakowski Filip, Keski_Rahkonen Anna, Raevuori Anu, Hudson James I., Reichborn_Kjennerud Ted, Monteleone Palmiero, Karwautz Andreas, Mannik Katrin, Baker Jessica H., O'Toole Julie K., Trace Sara E., Davis Oliver S. P., Helder Sietske G., Ehrlich Stefan, Herpertz_Dahlmann Beate, Danner Anna N., van Elburg Annemarie A., Clementi Maurizio, Forzan Monica, Docampo Elisa, Lissowska Jolanta, Hauser Joanna, Tortorella Alfonso, Maj Mario, Gonidakis Fragiskos, Tziouvas Konstantinos, Papezova Hana, Yilmaz Zeynep, Wagner Gudrun, Cohen_Woods Sarah, Herms Stefan, Julia Antonio, Rabionet Raquel, Dick Danielle M., Ripatti Samuli, Andreassen Ole A., Espeseth Thomas, Lundervold Astri J., Steen Vidar M., Pinto Dalila, Scherer Stephen W., Aschauer Harald, Schosser Alexandra, Alfredsson Lars, Padyukov Leonid, Halmi Katherine A., Mitchell James, Strober Michael, Bergen Andrew W., Kaye Walter, Szatkiewicz Jin Peng, Cormand Bru, Antoni Ramos_Quiroga Josep, Sanchez_Mora Cristina, Ribases Marta, Casas Miguel, Hervas Amaia, Jesus Arranz Maria, Haavik Jan, Zayats Tetyana, Johansson Stefan, Williams Nigel, Dempfle Astrid, Rothenberger Aribert, Kuntsi Jonna, Oades Robert D., Banaschewski Tobias, Franke Barbara, Buitelaar Jan K., Arias Vasquez Alejandro, Doyle Alysa E., Reif Andreas, Lesch Klaus_Peter, Freitag Christine, Rivero Olga, Palmason Haukur, Romanos Marcel, Langley Kate, Rietschel Marcella, Witt Stephanie H., Dalsgaard Soeren, Borglum Anders D., Waldman Irwin, Wilmot Beth, Molly Nikolas, Bau Claiton H. D., Crosbie Jennifer, Schachar Russell, K. Sandra, McGough James J., Grevet Eugenio H., Medland Sarah E., Robinson Elise, Weiss Lauren A., Bacchelli Elena, Bailey Anthony, Bal Vanessa, Battaglia Agatino, Betancur Catalina, Bolton Patrick, Cantor Rita, Celestino_Soper Patricia, Dawson Geraldine, De Rubeis Silvia, Duque Frederico, Green Andrew, Klauack Sabine M., Leboyer Marion, Levitt Pat, Maestrini Elena, Mane Shrikant, Moreno_De_Luca Daniel, Parr Jeremy, Regan Regina, Reichenberg Abraham, Sandin Sven, Vorstman Jacob, Wassink Thomas, Wijsman Ellen, Cook Edwin, Santangelo Susan, Delorme Richard, Roge Bernadette, Magalhaes Tiago, Arking Dan, Schulze Thomas G., Thompson Robert C., Strohmaier Jana, Matthews Keith, Melle Ingrid, Morris Derek, Blackwood Douglas, McIntosh Andrew, Bergen Sarah E., Schalling Martin, Jamain Stephane, Maaser Anna, Fischer Sascha B., Reinbold Celine S., Fullerton Janice M., Guzman_Parra Jose, Mayoral Fermin, Schofield Peter R., Cichon Sven, Muhleisen Thomas W., Degenhardt Franziska, Schumacher Johannes, Bauer Michael, Mitchell Philip B., Gershon Elliot S., Rice John, Potash James B., Zandi Peter P., Craddock Nick, Ferrier I. Nicol, Alda Martin, Rouleau Guy A., Turecki Gustavo, Ophoff Roel, Pato Carlos, Anjorin Adebayo, Stahl Eli, Leber Markus, Czernski Piotr M., Cruceanu Cristiana, Jones Ian R., Posthuma Danielle, Andlauer Till F. M., Forstner Andreas J., Streit Fabian, Baune Bernhard T., Air Tracy, Sinnamon Grant, Wray Naomi R., MacIntyre Donald J., Porteous David, Homuth Georg, Rivera Margarita, Grove Jakob, Middeldorp Christel M., Hickie Ian, Pergadia Michele, Mehta Divya, Smit Johannes H., Jansen Rico, de Geus Eco, Dunn Erin, Li Qingqin S., Nauck Matthias, Schoevers Robert A., Beekman Aartjan T. F., Knowles James A., Viktorin Alexander, Arnold Paul, Barr Cathy L., Bedoya_Berrio Gabriel, Bienvenu O. Joseph, Brentani Helena, Burton Christie, Camarena Beatriz, Capi Carolina, Cath Danielle, Cavallini Maria, Cusi Daniele, Darrow Sabrina, Denys Damiaan, Derks Eske M., Dietrich Andrea, Fernandez Thomas, Figeo Martijn, Freimer Nelson, Gerber Gloria, Grados Marco, Greenberg Erica, Hanna Gregory L., Hartmann Andreas, Hirschtritt Matthew E., Hoekstra Pieter J., Huang Alden, Huyser Chaim, Illmann Cornelia, Jenike Michael, Kuperman Samuel, Leventhal Bennett, Lochner Christine, Lyon Gholsion J., Macciardi Fabio, Madrugada_Garrido Marcos, Malaty Irene A., Maras Athanasios, McGrath Lauren, Miguel Euripedes C., Mir Pablo, Nestadt Gerald, Nicolini Humberto, Okun Michael S., Pakstis Andrew, Paschou Peristera, Piacentini John, Pittenger Christopher, Plessen Kerstin, Ramensky Vasily, Ramos Eliana M., Reus Victor, Richter Margaret A., Riddle Mark A., Robertson Mary M., Roessner Veit, Rosario Maria, Samuels Jack F., Sandor Paul, Stein Dan J., Tsetsos Fotis, Van Nieuwerburgh Filip, Weatherall Sarah, Wendland Jens R., Wolanczyk Tomasz, Worbe Yulia, Zai Gwyneth, Goes Fernando S., McLaughlin Nicole, Nestadt Paul S., Grabe Hans_Jorgen, Depienne Christel, Konkashbaev Anuar, Lanzagorta Nuria, Valencia_Duarte Ana, Bramon Elvira, Buccola Nancy, Cahn Wiekpe, Cairns Murray, Chong Siow A., Cohen David, Crespo_Facorro Benedicto, Crowley James, Davidson Michael, DeLisi Lynn, Dinan Timothy, Donohoe Gary, Drapeau Elodie, Duan Jubao, Haan Lieuwe, Hougaard David, Karachanak_Yankova Sena, Khrunin Andrew, Klovins Janis, Kucinkas Vaidutis, Keong Jimmy Lee Chee, Limborska Svetlana, Loughland Carmel, Lonnqvist Jouko, Maher Brion, Mattheisen Manuel, McDonald Colm, Murphy Kieran C., Nenadic Igor, van Os Jim, Pantelis Christos, Pato Michele, Petryshen Tracey, Quedest Digby, Roussos Panos, Sanders Alan R., Schall Ulrich, Schwab Sibylle G., Sim Kang, So Hon_Cheong, Stoegmann Elisabeth, Subramaniam Mythily, Toncheva Draga, Waddington John, Walters James, Weiser Mark, Cheng Wei, Cloninger Robert, Curtis David, Gejman Pablo V., Henskens Frans, Mattingdal Morten, Oh Sang_Yun, Scott Rodney, Webb Bradley, Breen Gerome, Churchhouse Claire, Bulik Cynthia M., Daly Mark, Dichgans Martin, Faraone Stephen V., Guerreiro Rita, Holmans Julie, Kender Kenneth S., Koeleman Bobby, Mathews Carol A., Price Alkes, Scharf Jeremiah, Sklar Pamela, Williams Peter, Wood Nicholas W., Cotsapas Chris, Palotie Aarno, Smoller Jordan W., Sullivan Patrick, Rosand Jonathan, Corvin Aiden, Neale Benjamin M. Analysis of Shared Heritability in Common Disorders of the Brain. *Science*, Volume: 360, Issue: 6395, Article Number: eaap8757, Published: JUN 22 2018 Impactfactor (2017): 41.058; Ranking: 2/64, Q1 Cornelis Senne, Fauvarit Maarten, Gansemans Yannick, Vander Plaetsen Ann_Sophie, Colle Frederik, Wiederkehr Rodrigo S., Deforce Dieter, Stakenborg Tim, Van Nieuwerburgh Filip Multiplex STR amplification sensitivity in a silicon microchip. *Scientific Reports*, Volume: 8, Article Number: 9853, Published: JUN 29 2018 Impactfactor (2017): 4.122; Ranking: 12/64, Q1 Popovic M., Dheedene A., Christodoulou C., Taelman J., Dhaenens L., Van Nieuwerburgh F., Deforce D., Van den Abbeel E., De Sutter P., Menten B., Heindryckx B. Chromosomal mosaicism in human blastocysts: the ultimate challenge of preimplantation genetic screening? *Human Reproduction*, Volume: 33, Issue: 7, Pages: 1342+, Published: JUL 2018 Impactfactor (2017): 4.99; Ranking: 2/29, Q1 Nishiyama Tomoaki, Sakayama Hidetoshi, de Vries Jan, Buschmann Henrik, Saint_Marcoux Denis, Ullrich Kristian K., Haas Fabian B., Vanderstraeten Lisa, Becker Dirk, Lang Daniel, Vosolsobe Stanislav, Rombauts Stephane, Wilhelmsson Per K. I., Janitza Philipp, Kern Ramona, Heyl Alexander, Ruempler Florian, Villalobos Luz Irina A. Calderon, Clay John M., Skokan Roman, Toyoda Atsushi, Suzuki Yutaka, Kagoshima Hiroshi, Schijlen Elio, Tajeshwar Navindra, Catarino Bruno, Hetherington Alexander J., Saltykova Assia, Bonnot Clemence, Breuning Holger, Symeonidi Aikaterini, Radhakrishnan Guru V., Van Nieuwerburgh Filip, Deforce Dieter, Chang Caren, Karol Kenneth G., Hedrich Rainer, Ulvskog Peter, Gloeckner Gernot, Delwiche Charles F., Petrusek Jan, Van de Peer Yves, Friml Jiri, Beilby Mary, Dolan Liam, Kohara Yuiji, Sugano Sumio, Fujiyama Asao, Delaux Pierre_Marc, Quint Marcel, Theissen Gunter, Hagemann Martin, Harholt Jesper, Dunand Christophe, Zachgo Sabine, Langdale Jane, Maumus Florian, Van Der Straeten Dominique, Gould Sven B., Rensing Stefan A. The Chara Genome: Secondary Complexity and Implications for Plant Terrestrialization. *Cell*, Volume: 174, Issue: 2, Pages: 448+, Published: JUL 12 2018 Impactfactor (2017): 31.398; Ranking: 2/292, Q1 Lotte Vermeulen, Juan Fraire, Laurens Raes, Ellen De Meester, Sarah De Keulenaer, Filip Van Nieuwerburgh, Stefaan De Smedt, Katrien Remaut, Kevin Braeckmans Photothermally triggered endosomal escape and its influence on transfection efficiency of gold_functionalized JetPEI/pDNA nanoparticles. *IJMS*, Volume: 19, Issue: 8, Article Number: 2400, Published: AUG 2018 Impactfactor (2017): 3.687; Ranking: 90/293, Q2 Yunhui Zhang, Andrea Sass, Heleen Van Acker, Jasper Wille, Bruno Verhasselt, Filip Van Nieuwerburgh, Volkhard Kaefer, Aurélie Crabbé and Tom Coenye Coumarin reduces virulence and biofilm formation in *Pseudomonas aeruginosa* by affecting quorum sensing, type III secretion and c-di_GMP levels. *Frontiers in Microbiology*, Volume: 9, Article Number: 1952, Published: AUG 21 2018 Impactfactor (2017): 4.019; Ranking: 32/126, Q2 Jeremias G, Barbosa J, Marques S, De Schampelaere K, Van Nieuwerburgh F, Deforce D, Gonçalves F, Pereira J, Asselman J. Transgenerational inheritance of DNA methylation patterns in *Daphnia magna* in response to salinity stress. *Environmental Science & Technology*, Volume: 52, Issue: 17, Pages: 10114_10123, Published: SEP 4 2018 Impactfactor (2017): 6.653; Ranking: 4/50, Q1 Tavernier Sarah, Sass Andrea, De Bruyne Michiel, Baeke Femke, De Rycke Riet, Crabbé Aurélie, Vandecandelaere Ilse, Van Nieuwerburgh Filip, Coenye, Tom Decreased susceptibility of *Streptococcus anginosus* to vancomycin in multispecies biofilms is due to increased thickness of the cell wall. *Journal of Antimicrobial Chemotherapy*, Volume: 73, Issue: 9, Pages: 2323_2330, Published: SEP 2018 Impactfactor (2017): 5.217; Ranking: 8/88, Q1 Jeong Tae_Yong, Asselman J, De Schampelaere KAC, Van Nieuwerburgh Filip, Deforce Dieter, Kim Sang Effect of β _adrenergic receptor agents on cardiac structure and function and whole_body gene expression in *Daphnia magna*. *Environmental Pollution*, Volume: 241, Pages: 869_878 Published: OCT 2018 Impactfactor (2017): 5.291; Ranking: 40/242, Q1 Warriar S., Taelman J., Tilleman L., Van der Jeught M., Duggal G., Lierman S., Popovic M., Van Soom A., Peelman L., Van Nieuwerburgh F., Deforce D., Lopes S. M. Chuva de Sousa, De Sutter P., Heindryckx B. Transcriptional landscape changes during human embryonic stem cell derivation. *Molecular Human Reproduction*, Volume: 24, Issue: 11, Pages: 543_555, Published: NOV 2018 Impactfactor (2017): 3.449; Ranking: 9/82, Q1 Decaestecker Bieke, Denecker Geertrui, Van Neste Christophe, Dolman Emmy M., Van Loocke Wouter, Gartlgruber Moritz, Nunes Carolina, De Vloed Fanny, Depuydt Pauline, Verboom Karen, Rombaut Dries, Looontens Siebe, De Wyn Jolien, Kholosy Waleed M., Koopmans Bianca, Essing Anke H. W., Herrmann Karl, Dreidax Daniel, Durinck Kaat, Deforce Dieter, Van Nieuwerburgh Filip, Henssen Anton, Versteeg Rogier, Boeva Valentina, Schliepacher Gudrun,

van Nes Johan, Mestdagh Pieter, Vanhauwaert Suzanne, Schulte Johannes H., Westermann Frank, Molenaar Jan J., De Preter Katleen, Speleman Frank TBX2 is a neuroblastoma core regulatory circuitry component enhancing MYCN/FOXM1 reactivation of DREAM targets. *Nature Communications*, Volume: 9, Article Number: 4866, Published: NOV 19 2018 Impactfactor (2017): 12.353; Ranking: 3/64, Q1 Stijn Van den Brande, Marijke Gijbels, Niels Wynant, Dulce Santos, Lina Mingels, Yannick Gansemans, Filip Van Nieuwerburgh, Jozef Vanden Broeck The presence of extracellular microRNAs in the media of cultured *Drosophila* cells. *Scientific Reports*, Volume: 8, Article Number: 17312, Published: NOV 23 2018 Impactfactor (2017): 4.122; Ranking: 12/64, Q1 Annelies Parmentier, Annelies Billiet, Guy Smagghe, Peter Vandamme, Dieter Deforce, Filip Van Nieuwerburgh, Ivan Meeus A prokaryotic_eukaryotic relation in the fat body of *Bombus terrestris*. *Environmental Microbiology Reports*, Volume: 10, Issue: 6, Pages: 644_650, Published: DEC 2018 Impactfactor (2017): 2.885; Ranking: 79/242, Q2 Senne Cornelis, Yannick Gansemans, Ann_Sophie Vander Plaetsen, Jana Weymaere, Sander Willems, Dieter Deforce, Filip Van Nieuwerburgh. Forensic tri_allelic SNP genotyping using nanopore sequencing. *Forensic Science International: Genetics*, Volume: 38, Pages: 204_210, Published: JAN 2019 Impactfactor (2017): 5.673; Ranking: 1/16, Q1 Mar Fernández, Ivan Meeus; Annelies Billiet, Filip Van Nieuwerburgh, Dieter Deforce, Peter Vandamme, Elisa Viñuela, Guy Smagghe Influence of microbiota in the susceptibility of parasitic wasps to abamectin insecticide: deep sequencing, esterase and toxicity tests. *Pest Management Science*, Volume: 75, Issue: 1, Pages: 79_86, Published: JAN 2019 Impactfactor (2017): 3.249; Ranking: 8/87, Q1 Jana Asselman, Emmanuel Van Acker, Maarten De Rijcke, Laurentijn Tillemans, Filip Van Nieuwerburgh, Jan Mees, Karel De Schampelaere, and Colin Janssen Marine biogenics in sea spray aerosols interact with the mTOR signaling pathway. *Scientific Reports*, Volume: 9, Article Number: 675, Published: JAN 24 2019 Impactfactor (2017): 4.122; Ranking: 12/64, Q1 Semmouri Ilias, Asselman Jana, Van Nieuwerburgh Filip, Deforce Dieter, Janssen Colin R., De Schampelaere Karel A. C. The transcriptome of the marine calanoid copepod *Temora longicornis* under heat stress and recovery. *Marine Environmental Research*, Volume: 143, Pages:10_23, Published: JAN 2019 Impactfactor (2018): 3.445; Ranking: 9/108, Q1 De Smedt Renate, Peirs Sofie, Morscio Julie, Matthijssens Filip, Roels Juliette, Reunes Lindy, Lintermans Beatrice, Goossens Steven, Lammens Tim, Van Roy Nadine, Touzart Aurore, Jenni Silvia, Tsai Yi_Chien, Lovisa Federica, Mussolin Lara, Serafin Valentina, Van Nieuwerburgh Filip, Deforce Dieter, Uyttebroeck Anne, Tousseyn Thomas, Burkhardt Birgit, Klapper Wolfgang, De Moerloose Barbara, Benoit Yves, Macintyre Elizabeth, Bourquin Jean_Pierre, Basso Giuseppe, Accordi Benedetta, Bornhauser Beat, Meijerink Jules, Vandenberghe Peter, Van Vlierberghe Pieter Preclinical evaluation of second generation PIM inhibitors for the treatment of T_cell acute lymphoblastic leukemia and lymphoma. *Haematologica*, Volume: 104, Issue: 1, Pages:E17_E20, Published: JAN 2019 Impactfactor (2018): 7.570; Ranking: 7/73, Q1 Vanechoutte Mario, Guschin Alexander, Van Simaey Leen, Gansemans Yannick, Van Nieuwerburgh Filip, Cools Piet Emended description of *Gardnerella vaginalis* and description of *Gardnerella leopoldii* sp. nov., *Gardnerella piotii* sp. nov. and *Gardnerella swidsinskii* sp. nov., with delineation of 13 genomic species within the genus *Gardnerella*. *International Journal of Systematic and Evolutionary Microbiology*, Volume: 69, Issue: 3, Pages:679_687, Published: MAR 2019 Impactfactor (2018): 2.166; Ranking: 94/133, Q3 Sass Andrea, Slachmuylders Lisa, Van Acker Heleen, Vandenbussche Ian, Ostyn Lisa, Bove Mona, Crabbe Aurelie, Chiarelli Laurent R., Buroni Silvia, Van Nieuwerburgh Filip, Abatih Emmanuel, Coenye Tom Various Evolutionary Trajectories Lead to Loss of the Tobramycin_Potentiating Activity of the Quorum_Sensing Inhibitor Baicalin Hydrate in *Burkholderia cenocepacia* Biofilms. *Antimicrobial Agents and Chemotherapy*, Volume: 63, Issue: 4, Article Number: e02092_18, Published: APR 2019 Impactfactor (2018): 4.715; Ranking: 27/267, Q1 Milani Gloria, Matthijssens Filip, Van Loocke Wouter, Durinck Kaat, Roels Juliette, Peirs Sofie, Thenoz Morgan, Pieters Tim, Reunes Lindy, Lintermans Beatrice, Vandamme Niels, Lammens Tim, Van Roy Nadine, Van Nieuwerburgh Filip, Deforce Dieter, Schwab Claire, Raimondi Susana, Dalla Pozza Luciano, Carroll Andrew J. III, De Moerloose Barbara, Benoit Yves, Goossens Steven, Berx Geert, Harrison Christine J., Basso Giuseppe, Cave Helene, Sutton Rosemary, Asnafi Vahid, Meijerink Jules, Mullighan Charles, Loh Mignon, Van Vlierberghe Pieter Genetic characterization and therapeutic targeting of MYC_rearranged T cell acute lymphoblastic leukemia. *British Journal of Haematology*, Volume: 185, Issue: 1, Pages: 169_174, Published: APR 2019 Impactfactor (2018): 5.206; Ranking: 13/73, Q1 Asselman Jana, Semmouri Ilias, Jackson Craig E., Keith Nathan, Van Nieuwerburgh Filip, Deforce Dieter, Shaw Joseph R., De Schampelaere Karel A. G. Genome_Wide Stress Responses to Copper and Arsenic in a Field Population of *Daphnia*. *Environmental Science & Technology*, Volume: 53, Issue: 7, Pages: 3850_3859, Published: APR 2 2019 Impactfactor (2018): 7.149; Ranking: 14/250, Q1 Xiaoyuan Lin, Evy Beckers, Séan Mc Cafferty, Yannick Gansemans, Katarzyna Joanna Szymańska, Krishna Chaitanya Pavani, João P Portela Catani, Filip Van Nieuwerburgh, Dieter Deforce, Petra De Sutter, Ann Van Soom, Luc Peelman. Bovine embryo_secreted microRNA_30c is a potential non_invasive biomarker for hampered preimplantation developmental competence. *Frontiers in Genetics*, Volume: 10, Article Number: 315, Published: APR 5 2019 Impactfactor (2018): 3.517; Ranking: 56/174, Q2 Taelman Jasin, Popovic Mina, Bialecka Monika, Tillemans Laurentijn, Warriar Sharat, Van der Jeught Margot, Menten Bjorn, Deforce Dieter, De Sutter Petra, Van Nieuwerburgh Filip, Abe Kuniya, Heindryckx Bjorn, Lopes Susana M. Chuva De Sousa WNT Inhibition and Increased Fibroblast Growth Factor Signaling Promotes Derivation of Less Heterogeneous Primed Human Embryonic Stem Cells, Compatible with Differentiation. *Stem Cells and Development*, Volume: 28, Issue: 9, Special Issue: SI, Pages: 579_592, Published: MAY 2019 Impactfactor (2018): 3.147; Ranking: 60/136, Q2 Senne Cornelis, Olivier Tytgat, Maarten Fauvar, Yannick Gansemans, Ann_Sophie Vander Plaetsen, Rodrigo Wiederkehr, Dieter Deforce, Filip Van Nieuwerburgh*, and Tim Stakenborg* Silicon μPCR chip for forensic STR profiling with HyBeacon probe melting curves. *Scientific Reports*, Volume: 9, Article Number: 7341, Published: MAY 14 2019 Impactfactor (2018): 4.011; Ranking: 15/69, Q1 Bart J.G. Broeckx, Lina De Smet, Tjeerd Blacquièrre, Kevin Maebe, Mikalaj Khalenkow, Mario Van Poucke, Bjorn Dahle, Peter Neumann, Kim Bach Nguyen, Guy Smagghe, Dieter L Deforce, Filip Van Nieuwerburgh, Luc Peelman, Dirk C. de Graaf Honey bee predisposition of resistance to ubiquitous mite infestations. *Scientific Reports*, Volume: 9, Article Number: 7794, Published: MAY 24 2019 Impactfactor (2018): 4.011; Ranking: 15/69, Q1 Markouli C., De Deckersberg E. Couvreur, Regin M., Nguyen H. T., Zambelli F., Keller A., Dziedzicka D., De Kock J., Tillemans L., Van Nieuwerburgh F., Franceschini L., Sermon K., Geens M., Spits C. Gain of 20q11.21 Human Pluripotent Stem Cells Impairs TGF_beta_Dependent Neuroectodermal Commitment. *Stem Cell Reports*, Volume: 13, Issue: 1, Pages: 163_176, Published: JUL 9 2019 Impactfactor (2018): 5.499; Ranking: 5/26, Q1 Evelien Bogaerts, Christel P.H. Moons, Filip Van Nieuwerburgh, Luc Peelman, Jimmy H. Saunders, Bart J.G. Broeckx Rejections in a non_purpose bred assistance dog population: reasons, consequences and methods for screening. *Plos One*, Volume: 14, Issue: 6, Article Number: e0218339, Published: JUN 13 2019 Impactfactor (2018): 2.776; Ranking: 24/69, Q2 Dulce Santos, Lina Mingels, Elise Vogel, Luoluo Wang, Olivier Christiaens, Kaat Cappelle, Niels Wynant, Yannick Gansemans, Filip Van Nieuwerburgh, Guy Smagghe, Luc Swevers, Jozef Vanden Broeck Generation of Virus_and dsRNA_Derived siRNAs with Species_Dependent Length in Insects. *VIRUSES_BASEL*, Volume: 11, Issue: 8, Article Number: 738, Published: AUG 2019 Impactfactor (2018): 3.811; Ranking: 11/36, Q2 Lemmens Liesbeth, Tillemans Laurentijn, De Koning Ezra, Valegard Karin, Linds Ann_Christin, Van Nieuwerburgh Filip, Maes Dominique, Peeters Eveline YtrA(Sa), a GntR_family transcription factor, represses two genetic loci encoding membrane proteins in *Sulfolobus acidocaldarius*. *Frontiers in Microbiology*, Volume: 10, Article Number: 2084, Published: SEP 10 2019 Impactfactor (2018): 4.259; Ranking: 32/133, Q1 Félix Carina, Meneses Rodrigo, Gonçalves Micael, Tillemans Laurentijn, Duarte Ana Sofia, Jorrin Jesus, Van de Peer Yves, Deforce Dieter, Van Nieuwerburgh Filip, Esteves Ana, Alves Artur A multi_omics analysis of the grapevine pathogen *Lasiodiplodia theobromae* reveals that temperature affects the expression of virulence_and pathogenicity_related genes. *Scientific Reports*, Volume: 9, Article Number: 13144, Published: SEP 11 2019 Impactfactor (2018): 4.011; Ranking: 15/69, Q1 Alexander Keller, Laurentijn Tillemans, Dominika Dziedzicka, Filippo Zambelli, Karen Sermon, Filip Van Nieuwerburgh, Claudia Spits, Mieke Geens Uncovering low_level mosaicism in human embryonic stem cells using high throughput single cell shallow sequencing. *Scientific Reports*, Volume: 9, Article Number: 14844, Published: OCT 16 2019 Impactfactor (2018): 4.011; Ranking: 15/69, Q1 Andrea M. Sass, Stijn De Waele, Simon Daled, Bart Devreese, Dieter Deforce, Filip Van Nieuwerburgh, Tom Coenye Small RNA NcS27 co_regulates utilization of carbon sources in *Burkholderia cenocepacia* J2315. *Microbiology_SGM*, Volume: 165, Issue: 10, Pages: 1135_1150, Published: OCT 2019 Impactfactor (2018): 1.922; Ranking: 101/133, Q4 Van Poucke Mario, Stee Kimberley, Sonck Laurien, Stock Emmelie, Bosseler Leslie, Van Dorpe Jo, Van Nieuwerburgh Filip, Deforce Dieter, Peelman Luc J., Van Ham Luc, Bhatti Sofie F. M., Broeckx Bart J. G. Truncating SLC12A6 variants cause different clinical phenotypes in humans and dogs. *European Journal of Human Genetics*, Volume: 27, Issue: 10, Pages: 1561_1568, Published: OCT 2019 Impactfactor (2018): 3.650; Ranking: 49/174, Q2 Brown Peter, et al. Large expert_curated database for benchmarking document similarity detection in biomedical literature search. *Database, The journal of Biological Databases and Curation*, Article Number: baz085, Published: OCT 29 2019 Impactfactor (2018): 3.683; Ranking: 7/59, Q1 Tang M., Guggilla R. R., Gansemans Y., Van der Jeught M., Boel A., Popovic M., Stamatiadis P.,

Ferrer_Buitrago M., Thys V, Van Coster R., Deforce D., De Sutter P., Van Nieuwerburgh F., Heindryckx B. Comparative analysis of different nuclear transfer techniques to prevent the transmission of mitochondrial DNA variants. *Molecular Human Reproduction*, Volume: 25, Issue: 12, Pages: 797_810, Published: DEC 2019 Impactfactor (2018): 3.396; Ranking: 4/29, Q1 Goncalves Micael F. M., Nunes Rui B., Tilleman Laurentijn, Van de Peer Yves, Deforce Dieter, Van Nieuwerburgh Filip, Esteves Ana C., Alves Artur Dual RNA Sequencing of *Vitis vinifera* during *Lasioidiplodia theobromae* Infection Unveils Host_Pathogen Interactions. *Int. J. Mol. Sci.*, Volume: 20, Issue: 23, Article Number: 6083, Published: DEC 2019 Impactfactor (2018): 4.183; Ranking: 78/299, Q2 Katrien Smits, Yannick Gansemans, Laurentijn Tilleman, Filip Van Nieuwerburgh, Margot Van De Velde, Ilse Gerits, Cyrillus Ververs, Kim Roels, Jan Govaere, Luc Peelman, Dieter Deforce, Ann Van Soom Maternal recognition of pregnancy in the horse: are microRNAs the secret messengers? *MDPI, International Journal of Molecular Sciences*, Volume: 21, Issue: 2, Article Number: 419, Published: JAN 2 2020 Impactfactor (2019): 4.556; Ranking: 74/297, Q1 Fraire Juan C., Houthaevae Gaelle, Liu Jing, Raes Laurens, Vermeulen Lotte, Stremersch Stephan, Brans Toon, Barriga Gerardo Garcia_Diaz, De Keulenaer Sarah, Van Nieuwerburgh Filip, De Rycke Riet, Vandesompele Jo, Mestdagh Pieter, Raemdonck Koen, De Vos Winnok H., De Smedt Stefaan, Braeckmans Kevin Vapor Nanobubble is the more reliable photothermal mechanism for inducing endosomal escape of siRNA without disturbing cell homeostasis. *Journal of Controlled Release*, Volume: 319, Pages: 262_275, Published: MAR 10 2020 Impactfactor (2019): 7.727; Ranking: 10/270, Q1 Tytgat Olivier, Gansemans Yannick, Weymaere Jana, Rubben Kaat, Deforce Dieter, Van Nieuwerburgh Filip Nanopore Sequencing of a Forensic STR Multiplex Reveals Loci Suitable for Single_Contributor STR Profiling. *Genes*, Volume: 11, Issue: 4, Article Number: 381, Published: APR 2020 Impactfactor (2019): 3.759; Ranking: 53/177, Q2 Berlamont Helena, De Witte Chloe, Bauwens Eva, Jou Hannah Min, Ducatelle Richard, De Meester Ellen, Gansemans Yannick, Deforce Dieter, Van Nieuwerburgh Filip, Haesebrouck Freddy, Smet Annemieke Distinct transcriptome signatures of *Helicobacter suis* and *Helicobacter heilmannii* strains upon adherence to human gastric epithelial cells. *Veterinary Research*, Volume: 51, Issue: 1, Published: MAY 7 2020 Impactfactor (2019): 3.357; Ranking: 6/142, Q1 Pelst Michael P., Hoebart Clara, Wallaey Charlotte, De Rooster Hilde, Gansemans Yannick, Van Nieuwerburgh Filip, Devriendt Bert, Cox Eric Adjuvanting allergen extracts for sublingual immunotherapy: Calcitriol downregulates CXCL8 production in primary sublingual epithelial cells. *Frontiers in Immunology, section Mucosal Immunity*, Volume: 11, Article Number: 1033, Published: JUN 9 2020 Impactfactor (2019): 5.085; Ranking: 38/158, Q1 Van Campenhout Sanne, Tilleman Laurentijn, Lefere Sander, Vandierendonck Astrid, Raevens Sarah, Verhelst Xavier, Geerts Anja, Van Nieuwerburgh Filip, Van Vlierberghe Hans, Devisscher Lindsey Myeloid_specific IRE1alpha deletion reduces tumour development in a diabetic, non_alcoholic steatohepatitis_induced hepatocellular carcinoma mouse model. *Metabolism – Clinical and Experimental*, Volume: 107, Article Number: 154220, Published: JUN 2020 Impactfactor (2019): 6.159; Ranking: 17/143, Q1 Taveirne Sylvie, Wahlen Sigrid, Van Loocke Wouter, Kiekens Laura, Persyn Eva, Van Ammel Els, De Mulder Katrien, Roels Juliette, Tilleman Laurentijn, Aumercier Marc, Matthys Patrick, Van Nieuwerburgh Filip, Kerre Tessa C. C., Taghon Tom, Van Vlierberghe Pieter, Vandekerckhove Bart, Leclercq Georges The transcription factor ETS1 is an important regulator of human NK cell development and terminal differentiation. *Blood*, Volume: 136, Issue: 3, Pages: 288_298, Published: JUL 16 2020 Impactfactor (2019): 17.543; Ranking: 1/76, Q1 Lina Mingels, Niels Wynant, Dulce Santos, Paulien Peeters, Yannick Gansemans, Johan Billen, Filip Van Nieuwerburgh, and Jozef Vanden Broeck Extracellular vesicles spread the RNA interference signal of *Tribolium castaneum* TcA cells. *Insect Biochemistry and Molecular Biology*, Volume: 122, Article Number: 103377, Published: JUL 2020 Impactfactor (2019): 3.827; Ranking: 6/101, Q1 Semmouri Ilias, De Schampelaere Karel A. C., Van Nieuwerburgh Filip, Deforce Dieter, Janssen Colin R., Asselman Jana Spatio_temporal patterns in gene expression of the calanoid copepod *Temora longicornis* in the Belgian part of the North Sea. *Marine Environmental Research*, Volume: 160, Article Number: 105037, Published: SEP 2020 Impactfactor (2019): 2.272; Ranking: 18/107, Q1 Tilleman Laurentijn, Heindryckx Bjorn, Deforce Dieter, Van Nieuwerburgh Filip Pan_cancer pharmacogenetics: targeted sequencing panels or exome sequencing? *Pharmacogenomics*, Volume: 21, Issue: 15, Pages: 1073_1084, Published: OCT 2020 Impactfactor (2019): 2.339; Ranking: 168/271, Q3 Roels Juliette, Kuchmiy Anna, De Decker Matthias, Strubbe Steven, Lavaert Marieke, Liang Kai Ling, Leclercq Georges, Vandekerckhove Bart, Van Nieuwerburgh Filip, Van Vlierberghe Pieter, Taghon Tom Distinct and temporary_restricted epigenetic mechanisms regulate human $\alpha\beta$ and $\gamma\delta$ T cell development. *Nature Immunology*, Volume: 21, Issue: 10, Pages: 1280_, Published: OCT 2020 Impactfactor (2019): 20.479; Ranking: 3/159, Q1

Projects Limited to current, ongoing projects: Development and validation of an integrated Lab_on_a_Chip (LoC) for STR analysis. Characterization of extracellular RNA_signals and their role in antiviral immunity in insects. Identification of adaptive mechanisms leading to reduced antibiotic susceptibility in bacterial biofilms using experimental evolution and machine learning approaches.

Memberships Editorial Board Member of Nature Scientific Reports International Society of Forensic Genetics American Society of Human Genetics

Other Relevant Information