



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
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 - Position: Prof.
 - Activities: Research, Teaching
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Education and training

1. Subject: Ghent University
 - Start date: 101995
 - End date: 061999
 - Qualification: Pharm.D.
 - Organisation: Ghent University
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2. Subject: Ghent University
 - Start date: 092002
 - End date: 022007
 - Qualification: Ph.D.
 - Organisation: Ghent University
 - 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 Castele, 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 MEDICIN, 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: 24/160, 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, Podshivvalova 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 lent, Jurgen Piet, Delphine Beeckman, Arie van der Ende, Filip Van Nieuwerburgh, Patrik Bavoil, Garry Myers, Daisy Vanrompay, 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 Vandenabeele 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/jid.2012.350. Impactfactor (2011): 6.314; Ranking: 1/58, Q1 Annemieke 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, Fagerness 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 H, 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, Voyiatzaki E, Heutink P, Cath DC, Posthuma D, Smit JH, Samuels J, Bienvenu 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, Polachek 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, Pryszyk 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 BJB, 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, Bienvenu 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 Doudiah, Lieven De Zutter, Filip Van Nieuwerburgh, Dieter Deforce, Hanne Ingmer, Olivier Vandenberg, Anne Marie Van den Abele 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 Phillip, Messiaen Peter, O' Doherty Una, Vandekerckhove Linos Quantification of integrated HIV DNA by repetitive sampling Alu_HIV PCR based on Poisson Statistics. *Chemical 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 Bavegms, 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 Criekinge 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 cococcus pullicaeorum* 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 Smagghe 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 Erffelinck, 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*. 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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. Use of multimodal omics technologies to study dengue host response markers. Sequencing-based approach for optimal design of mRNA-LNPs for in situ CRISPR-mediated silencing of SIRPa in triple-negative breast cancer microenvironment. Defining circulating tumor DNA signatures in urine samples to improve prostate cancer screening and early stratification.

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