

## CURRICULUM VITAE

### PROF. DR. MOHAMED LAMKANFI

Inflammation Research Center  
Ghent University and VIB  
Technologiepark 927  
B-9052 Zwijnaard-Ghent  
Belgium  
Phone: +32 9 3313 730  
Fax: +32 9 221 7673  
E-mail: [mohamed.lamkanfi@UGent.be](mailto:mohamed.lamkanfi@UGent.be)

#### EDUCATION

2000 - 2004	<b>Ph.D.</b> in Biotechnology, with Felicitations of the Jury, Ghent University, Belgium (Title: <i>Role of CARD proteins in apoptosis and inflammation</i> ; Promotor: Prof. Dr. Peter Vandenebeele, Department of Molecular Biomedical Research, Ghent University)
1998 - 2000	<b>M.S.</b> in Biochemistry, Cum Laude, Ghent University, Belgium
1996- 1998	<b>B.S.</b> in Chemistry, Cum Laude, Ghent University, Belgium
1990- 1996	Sciences and Mathematics, Sint-Jan Berchmanscollege, Antwerp, Belgium

#### PROFESSIONAL EXPERIENCE

2012 - Present	Professor (hoofddocent, BOF-ZAP 100%) in Medical Biochemistry, Faculty of Medicine and Health Sciences, Ghent University
2010 - Present	Group Leader, Department of Medical Protein Research, VIB, Belgium <i>NOD-like Receptors (NLRs) in health and disease</i>
2010 - 2011	Professor (hoofddocent, 10%) in Medical Biochemistry, Faculty of Medicine and Health Sciences, Ghent University
2007 - 2009	Postdoctoral Research Fellow in Dr. Vishva Dixit's Lab, Department of Physiological Chemistry, Genentech Inc., South San Francisco, CA, USA <i>Molecular mechanisms of inflammasome activation</i>
2006 - 2007	Postdoctoral Research Fellow in Dr. Gabriel Nunez' Lab, Department of Pathology and Comprehensive Cancer Center, University of Michigan Medical School, Ann Arbor, MI, USA <i>Role of NLRs in the host response</i>

#### PEER-REVIEWED PUBLICATIONS (WEB OF SCIENCE TOTAL CITATIONS: 6521; H-INDEX: 45)

1. Vande Walle L.\*, Jiménez Fernández D.\* , Demon D., Van Laethem N., Van Hauwermeiren F., Van Gorp H., Van Opdenbosch N., Kayagaki N., **Lamkanfi M.** (\* Contributed equally) (2016) BCA: Does caspase-12 suppress inflammasome activation? **Nature** in press (ISI IF = 42.3)
2. de Vasconcelos M.N., Van Opdenbosch N., **Lamkanfi M.** (2016) Inflammasomes as polyvalent cell death platforms. **Cellular and Molecular Life Sciences** in press (ISI IF=5.8)
3. Van Hauwermeiren F., **Lamkanfi M.** (2016) The Nek-sus of the NLRP3 inflammasome. **Nature Immunology** 17(3):223-4. (ISI IF=25.0)
4. Rankin L.C., Girard-Madoux M.J.H., Seillet C., Mielke L.A., Kerdiles Y., Fenis A., Wieduwild E., Putoczki T., Mondot S., Lantz O., Demon D., Papenfuss A.T., Smyth G.K., **Lamkanfi M.**, Carotta S., Renauld J.-C., Shi W.,

- Carpentier S., Soos T., Arendt C., Ugolini S., Huntington N. D., Belz G. T.\* , Vivier E\*. (\* Contributed equally) (2016) Complementarity and redundancy of IL-22-producing innate lymphoid cells *Nature Immunology* 17(2):179-86 (ISI IF=25.0)
5. Gurung P., Li B., Subbarao M.R.K., **Lamkanfi M.**, Geiger T.L., Kanneganti T.-D. (2015) Chronic TLR Stimulation Controls NLRP3 Inflammasome Activation through IL-10 Mediated Regulation of NLRP3 Expression and Caspase-8 Activation. *Scientific Reports* 5:14488. doi:10.1038/srep14488. (ISI IF=5.6)
  6. Ydens E., Demon D., Lornet G., De Winter V., Timmerman V., **Lamkanfi M.**, Janssens S. (2015) Nlrp6 promotes recovery after peripheral nerve injury independently of inflammasomes. *Journal of Neuroinflammation* 12:143. doi: 10.1186/s12974-015-0367-8. (ISI IF=5.4)
  7. Saveedra P.H.V.\* , Demon D.\* , Van Gorp H., **Lamkanfi M.** (\* Contributed equally) (2015) Protective and Detrimental Roles of Inflammasomes in Disease. *Seminars in Immunopathology* 37(4):313-22. (ISI IF=6.5)
  8. Matusiak M., Van Opdenbosch N., **Lamkanfi M.** (2015) CARD- and pyrin-only proteins regulating inflammasome activation and immunity. *Immunological Reviews* 265(1):217-30. (ISI IF=12.9)
  9. Diabate M.\* , Munro P.\* , Garcia E.\* , Jacquel A., Michel G., Obba S., Goncalves D., Luci C., Marchetti S., Demon D., Degos C., Bechah Y., Mege J-L., **Lamkanfi M.**, Auburger P., Gorvel J-P., Stuart L. M., Landraud L., Lemichez E., Boyer L. (\* Contributed equally) (2015) Escherichia coli  $\alpha$ -Hemolysin counteracts the anti-virulence innate immune response triggered by the RhoGTPase activating toxin CNF1 during bacteremia. *PLoS Pathogens* 11(3):e1004732 (ISI IF=8.1)
  10. Man S. M., Karki R., Malireddi R.K.S., Neale G., Vogel P., Yamamoto M., **Lamkanfi M.**, Kanneganti T-D. (2015) The transcription factor IRF1 and guanylate-binding proteins target AIM2 inflammasome activation by Francisella infection. *Nature Immunology* 16(5):467-75. (ISI IF=25.0)
  11. Karki R., Man S.M., Malireddi R.K., Gurung P., Vogel P., **Lamkanfi M.**, Kanneganti T-D. (2015) Concerted activation of the AIM2 and NLRP3 inflammasomes orchestrates host protection against Aspergillus infection. *Cell Host Microbe* 17(3):357-68. (ISI IF=12.2)
  12. Gurung P., Karki R., Vogel P., Watanabe M., Bix M., **Lamkanfi M.**, Kanneganti T-D. (2015) An NLRP3 inflammasome-triggered Th2-biased adaptive immune response promotes leishmaniasis. *Journal of Clinical Investigation* 125(3):1329-38 (ISI IF=13.8)
  13. Gurung P., **Lamkanfi M.**, Kanneganti T.-D. (2015) SHARPIN Is Required for Optimal NLRP3 Inflammasome Activation. *Journal of Immunology* 194(5):2064-7 (ISI IF = 5.4)
  14. Matusiak M., Van Opdenbosch N., Vande Walle L., Sirard J.-C., Kanneganti T.-D., Lamkanfi M. (2015) Flagellin-induced NLRC4 phosphorylation primes the inflammasome for activation by NAIP5. *Proceedings of the National Academy of Sciences USA*. 112(5):1541-1546. (ISI IF = 9.8)
  15. Jiménez Fernández D., **Lamkanfi M.** Inflammatory caspases: key regulators of inflammation and cell death. *Biological Chemistry* 396(3):193-203 (ISI IF = 2.7)
  16. Demon D., Vande Walle L., **Lamkanfi M.** (2014) Sensing the enemy within: how macrophages detect intracellular Gram-negative bacteria. *Trends in Biochemical Sciences* 39(12):574-6. (ISI IF = 13.5)
  17. Lukens J., Gurung P., Vogel P., Johnson G., Carter R., McGoldrick D., Bandi S., Calabrese C., Vande Walle L., **Lamkanfi M.**, Kanneganti T.-D. (2014) Dietary modulation of the microbiome affects autoinflammatory disease. *Nature* 516(7530):246-9 (ISI IF = 42.3)
  18. Zhu Q., Man S.M., Gurung P., Liu Z., Vogel P., **Lamkanfi M.**, Kanneganti TD. (2014) STING Mediates Protection against Colorectal Tumorigenesis by Governing the Magnitude of Intestinal Inflammation. *Journal of Immunology* 193(10):4779-82 (ISI IF = 5.4)
  19. Van Gorp H.\* , Kuchmiy A.\* , Van Hauwermeiren F., **Lamkanfi M.** (\* Contributed equally) NOD-like receptors interfacing the immune and reproductive systems. *FEBS Journal* 281(20):4568-82 (ISI IF = 4.0)
  20. P.J.P. de Vree\*, E. de Wit\*, M. Yilmaz, M. van de Heijning, P. Klous, M.J.A.M. Verstegen, Y. Wan, H. Teunissen, P.

- H.L. Krijger, G. Geeven, P. P. Eijk, D. Sie, B. Ylstra, L.O.M. Hulsman, M.F. Van Dooren, L. J.C.M. van Zutven, A. van den Ouweland, S. Verbeek, K.W. van Dijk, M. Cornelissen, A.T. Das, B. Berkhout, B. Sikkema-Raddatz, E. van den Berg, P. van der Vlies, D. Weening, J.T. den Dunnen, M. Matusiak, **M. Lamkanfi**, M.J.L. Ligtenberg, P. ter Brugge, J. Jonkers, J.A. Foekens, J.W. Martens, R. van der Luijt, H. K. P. van Amstel, M. van Min, E. Splinter<sup>#</sup>, W. de Laat<sup>#</sup> (\* Contributed equally) Targeted sequencing by proximity ligation for comprehensive variant detection and local haplotyping. **Nature Biotechnology** 32(10):1019-25 (ISI IF = 39.08)
21. Demon D., Kuchmiy A., Fossoul A. Kanneganti T.-D.\* , **Lamkanfi M.\*** (\* Contributed equally) Caspase-11 protects against colitis independently of inflammasome-mediated cytokine production. **Mucosal Immunology** 7(6):1480-91 (ISI IF = 7.5)
22. Lupfer C.R., Anand P.K., Liu Z., Stokes K.L., Vogel P., **Lamkanfi M.**, Kanneganti T-D. (2014) Reactive Oxygen Species Regulate Caspase-11 Expression and Activation of the Non-canonical NLRP3 Inflammasome during Enteric Pathogen Infection. **PLoS Pathogens** 10(9):e1004410. (ISI IF = 8.1)
23. Vande Walle L., Van Opdenbosch N., Jacques P., Fossoul A., Beyaert R., Elewaut D., Kanneganti T-D., Van Loo G.\* , **Lamkanfi M.\*** (\* Contributed equally) Negative regulation of Nlrp3 inflammasome by A20 protects against arthritis. **Nature** 512(7512):69-73 (ISI IF = 42.3) **F1000**
24. **Lamkanfi M.**, Dixit V.M. (2014) Mechanisms and Functions of Inflammasomes. **Cell** 157(5):1013-1022. (ISI IF = 33.1)
25. Brussels G., Provoost S., Bracke K., Kuchmiy A., **Lamkanfi M.** (2014) Inflammasomes in respiratory disease: from bench to bedside. **Chest** 145(5):1121-1133 (ISI IF = 7.1)
26. Van Maele L., Fougeron D., Janot L., Didier-Laurent A., Cayet D., Tabareau J., Rumbo M., Corvo-Chamaillard S., Boulenouari S., Jeff S., , Vande Walle L., **Lamkanfi M.**, Lemoine Y., Erard F., Hot D., Hussell T., Ryffel B., Benecke A.G., Sirard J-C. (2014) Airway structural cells regulate TLR5-mediated mucosal adjuvant activity. **Mucosal Immunology** 7(3):489-500 (ISI IF = 7.5)
27. Van Opdenbosch N., Gurung P., Vande Walle L., Fossoul A., Kanneganti T.-D.\* , **Lamkanfi M.\*** (\* Contributed equally) (2014) Activation of the NLRP1b inflammasome independently of ASC-mediated caspase-1 autoproteolysis and speck formation. **Nature Communications** 5:3209. doi: 10.1038/ncomms4209. (ISI IF = 10.7)
28. Gurung P., Anand P. K., R. K. Subbarao Malireddi R.K.S., Vande Walle L., Van Opdenbosch N., Dillon C. P., Weinlich R., Green D.R., **Lamkanfi M.\***, Kanneganti T-D.\* (\* Contributed equally) (2014) FADD and caspase-8 mediate priming and activation of the canonical and non-canonical Nlrp3 inflammasomes. **Journal of Immunology** 192(4):1835-46 (ISI IF = 5.4)
29. Lukens J. R., Gross J. M., Calabrese C., **Lamkanfi M.**, Vogel P., Kanneganti T.-D. (2014) Critical role for inflammasome-independent IL-1 $\beta$  production in osteomyelitis. **Proceedings of the National Academy of Sciences USA** 111(3):1066-71 (ISI IF = 9.8)
30. Van Acker T., Eyckerman S., Vande Walle L., Gerlo S., Goethals M., **Lamkanfi M.**, Bovijn C., Tavernier J., Peelman F. (2014) The small GTPase Arf6 is essential for the Tram/TRIF pathway in TLR4 signaling. **Journal of Biological Chemistry** 289(3):1364-76 (ISI IF = 4.6)
31. Zaki M.H., Man S.M., Vogel P., **Lamkanfi M.**, Kanneganti T.-D. (2014) Salmonella exploits NLRP12-dependent innate immune signaling to suppress host defenses during infection. **Proceedings of the National Academy of Sciences USA** 111(1):385-90 (ISI IF = 9.8)
32. Kanneganti T-D., **Lamkanfi M.** (2013) K<sup>+</sup> drops tilt the NLRP3 inflammasome. **Immunity** 38(6):1085-1088 (ISI IF = 19.7)
33. Lukens J.R., Vogel P., Johnson G.R., Iwakura Y., **Lamkanfi M.\***, Kanneganti T-D.\* (\* Contributed equally) (2013) RIP1-driven autoinflammation targets IL-1 $\alpha$  independently of inflammasomes and RIP3-dependent necroptosis. **Nature** 498(7453):224-7 (ISI IF = 42.3)
34. Lupfer C., Thomas P. G., Anand P.K., Vogel P., Milasta S., Martinez J. , Huang G., Green M., Kundu M.m Chi H., Xavier R. J., Green D.R., **Lamkanfi M.**, Dinarello C.A., Doherty P.C., Kanneganti T-D. (2013) Receptor interacting protein kinase 2-mediated mitophagy regulates inflammasome activation during virus infection. **Nature Immunology**

14(5):480-488 (ISI IF = 25.0)

35. Amer A.O., **Lamkanfi M.**, Kanneganti T-D. (2012) Innate immune pathways in host defense. *Mediators of Inflammation* Article ID 708972 (ISI IF = 3.9)
36. **Lamkanfi M.**, Dixit V.M. (2012) Inflammasome signaling in health and disease. *Annual Review of Cell and Developmental Biology* 28:137-61 (ISI IF = 18.0)
37. Gurung P.\*, Malireddi S.R.K.\* , Anand P.K., Demon D., Vande Walle L., Liu Z., Vogel P., **Lamkanfi M.**, Kanneganti T-D. (\* Contributed equally) (2012) TRIF-mediated caspase-11 production integrates TLR4- and Nlrp3 inflammasome-mediated host defense against enteropathogens. *Journal of Biological Chemistry* 287(41):34474-83 (ISI IF = 4.7)
38. Qu Y.\* , Misaghi S.\* , Izrael-Tomasevic A., Newton K., Gilmour L. L., **Lamkanfi M.**, Louie S., Kayagaki N., Liu J., Kömüves L., Cupp J. E., Arnott D., Monack D., Dixit V.M. (\* contributed equally) (2012) Phosphorylation of NLRC4 is critical for inflammasome activation. *Nature* 490(7421):539-42 (ISI IF = 38.6)
39. Ippagunta S., Malireddi R.K.S., Shaw P.J., Neale G.A., Vande Walle L., Fukui Y., Green D.R., **Lamkanfi M.**, Kanneganti T-D. (2012) Addendum: Defective DOCK2 expression in a subset of ASC-deficient mouse lines. *Nature Immunology* 13(7):701-702 (ISI IF = 26.2)
40. Anand P.K., Malireddi R.K.S., Lukens J.R., Vogel P., Bertin J., **Lamkanfi M.\***, Kanneganti T-D.\* (\* contributed equally) (2012) NLRP6 Negatively Regulates Innate Immunity and Host Defense Against Bacterial Pathogens. *Nature* 488(7411):389-93 (ISI IF = 38.6)
41. **Lamkanfi M.** , Kanneganti T-D. (2012) The inflammasome: A remote control for metabolic syndrome. *Cell Research* 22(7):1095-1098 (ISI IF = 10.5)
42. Liu Z., Zaki Md. H., Vogel P., Gurung P., Finlay B.B., Deng W., **Lamkanfi M.** \*, Kanneganti TD. \* (\* Contributed equally) (2012) The role of inflammasomes in host defense against Citrobacter rodentium infection. *Journal of Biological Chemistry* 287(20):16955-16964. (ISI IF = 4.7)
43. **Lamkanfi M.** , Kanneganti T-D. (2012) Regulation of immune pathways by the NOD-like Receptor NLRC5. *Immunobiology* 217(1):13-16 (ISI IF = 2.8)
44. Zaki Md. H., Vogel P., Malireddi R. K. S., Anand P. K., Body-Malapel M., Bertin J., Green D. R., **Lamkanfi M.** , Kanneganti T-D. (2011) The NOD-like receptor Nlrp12 attenuates colon inflammation and tumorigenesis. *Cancer Cell* 20(5):649-60 (ISI IF = 26.6) (F1000)
45. Anand P. K, Tait S.W., **Lamkanfi M.**, Amer A. O., Nunez G., Green D. R., Kanneganti T-D. (2011) TLR2 and RIP2 pathways mediate autophagy of Listeria monocytogenes via ERK activation. *Journal of Biological Chemistry* 286(50):42981-91 (ISI IF = 4.8)
46. Kayagaki N., Warming S., **Lamkanfi M.**, Vande Walle L., Louie S., Dong J., Newton K., Qu Y., Liu J., Heldens S., Zhang J., Lee W. P., Roose-Girma M., Dixit V.M. (2011) Non-canonical inflammasome activation targets caspase-11. *Nature* 479(7371):117-121 (ISI IF = 36.3)
47. Kersse K., Bertrand M., **Lamkanfi M.\***, Vandenabeele P.\* (\* Contributed equally) (2011) Roles of NOD-like receptor proteins in innate immunity. *Cytokine & Growth Factor Reviews* 22(5-6):257-76 (ISI IF = 7.8)
48. Ippagunta S.\* , Malireddi R.K.S.\* , Shaw P.J.\* , Neale G.A., Vande Walle L., Fukui Y., Green D.R., **Lamkanfi M.**§, Kanneganti T-D.§ (\*§ Contributed equally) (2011) The inflammasome adaptor ASC regulates adaptive immune cell functions by controlling DOCK2-mediated Rac activation and actin polymerization. *Nature Immunology* 12(10):1010-1016 (ISI IF = 26.0)
49. **Lamkanfi M.** , Vande Walle L., Kanneganti T-D. (2011) Deregulated inflammasome signaling in disease.

Immunological Reviews 243(1):163-173 (ISI IF = 11.1)

50. Zaki Md.H., **Lamkanfi M.**, Kanneganti T-D. (2011) Inflammasomes and intestinal tumorigenesis. Drug Discovery Today Disease Mechanisms 8(3-4):e71-e78 (ISI IF = no IF yet)
51. Kersse K., **Lamkanfi M.**, Mathieu Bertrand, Vanden Berghe T.\* , Vandenabeele P.\* . (2011) Interaction Patches of procaspase-1 CARD are differently involved in procaspase-1 activation and RIP2-dependent NF-κB signaling. Journal of Biological Chemistry 286(41):35874-82 (\*Contributed equally) (ISI IF = 4.8)
52. **Lamkanfi M.**, Dixit V.M. (2011) Modulation of inflammasome pathways by bacterial and viral pathogens. Journal of Immunology 187(2):597-602 (ISI IF = 5.8)
53. Vande Walle L., **Lamkanfi M.** (2011) Inflammasomes: Caspase-1-activating platforms with critical roles in host defense. Frontiers in Microbiology 2:3 (ISI IF = no IF yet)
54. Vande Walle L., Kanneganti T-D., **Lamkanfi M.** (2011) HMGB1 release by inflammasomes. Virulence 2(2):162-165 (ISI IF = 2.3)
55. Zaki Md.H., **Lamkanfi M.**, Kanneganti T-D. (2011) The Nlrp3 inflammasome: contributions to intestinal homeostasis. Trends in Immunology 32(4):171-179 (ISI IF = 10.4)
56. **Lamkanfi M.** (2011) Emerging inflammasome effector mechanisms. Nature Reviews Immunology 11(3):213-220 (ISI IF = 33.3)
57. Zaki Md.H., Vogel P., Body-Malapel M., **Lamkanfi M.**, Kanneganti T-D. (2010). Interleukin-18 production downstream of the Nlrp3 inflammasome confers protection against colorectal tumor formation. Journal of Immunology 185(8):4912-4920 (ISI IF = 5.7)
58. **Lamkanfi M.**, Sarkar A., Vande Walle L., Vitari A. C. , Amer A. O., Wewers M. D., Tracey K. J., Kanneganti T-D., Dixit V. M. (2010) Inflammasome-dependent release of the alarmin HMGB1 in endotoxemia. Journal of Immunology 185(7):4385-4392 (ISI IF = 5.7) (F1000)
59. Malireddi R.K., Ippagunta S., **Lamkanfi M.\***, Kanneganti T-D.\* (2010). Proteolytic inactivation of poly (ADP-ribose) polymerase 1 by the Nlrp3 and Nlrc4 inflammasomes. Journal of Immunology 185(6):3127-3130 (\*Contributed equally) (ISI IF = 5.7)
60. **Lamkanfi M.**, Dixit V.M. (2010). Manipulation of host cell death pathways during microbial infections. Cell Host & Microbe 8(1):44-54 (ISI IF = 13.7)
61. Broz P., Newton K., **Lamkanfi M.**, Mariathasan S., Dixit V.M., Monack D.M. (2010) Redundant roles for the inflammasome receptors NLRP3 and NLRC4 in host defense against Salmonella. Journal of Experimental Medicine 207(8):1745-1755 (ISI IF = 14.8)
62. Zaki Md.H., Ippagunta S.K., Boyd K.L., **Lamkanfi M.\***, Kanneganti T-D.\* (\*Contributed equally) (2010). The NLRP3 inflammasome protects against loss of epithelial integrity and mortality during experimental colitis. Immunity 32(3):379-391 (ISI IF = 24.2) (F1000)
63. Shaw PJ., **Lamkanfi M.**, Kanneganti T-D. (2010). NOD-like receptor signaling beyond the inflammasome. European Journal of Immunology 40(3):624-627 (ISI IF = 4.9)
64. **Lamkanfi M.**, Kanneganti T-D. (2010). Nlrp3: an immune sensor of cellular stress and infection. International Journal of Biochemistry and Cell Biology 42(6):792-795 (ISI IF = 5.0)
65. Ippagunta S.K.\* , Brand D.D.\* , Luo J., Boyd K.L., Calabrese C., Stienstra SR., Van de Veerdonk F.L., Netea M.G., Joosten L.A.B. ¶, **Lamkanfi M.¶**, Kanneganti T-D.¶ (\*,¶ Contributed equally) (2010). Inflammasome-independent

- role of apoptosis-associated speck-like protein containing a CARD (ASC) in T cell priming and collagen-induced arthritis. *Journal of Biological Chemistry* 285(16):12454-12462 (ISI IF = 5.3)
66. Vande Walle L., Wirawan E., **Lamkanfi M.**, Festjens N., Versputen J., Saelens X., Vanden Berghe T., Vandenabeele P. (2010). The mitochondrial serine protease HtrA2/Omi cleaves RIP1 during apoptosis of Ba/F3 cells induced by growth factor withdrawal. *Cell Research* 20(4):421-433 (ISI IF = 9.4)
  67. **Lamkanfi M.**, Kanneganti T-D. (2010). Caspase-7: a protease involved in apoptosis and inflammation. *International Journal of Biochemistry and Cell Biology* 42(1):21-24 (ISI IF = 5.0)
  68. **Lamkanfi M.**, Dixit V. M. (2009). The inflammasomes. *PLoS Pathogens* 5(12):e1000510 (ISI IF = 9.0)
  69. **Lamkanfi M.**, Mueller JL., Vitari AC., Misaghi S., Hoffman H., Dixit VM. (2009). Glyburide inhibits the Cryopyrin/Nalp3 inflammasome. *Journal of Cell Biology* 187(1):61-70 (ISI IF = 9.6)
  70. **Lamkanfi M.**, Dixit V. M. (2009). IL-33 raises alarm. *Immunity* 31(1):5-7 (ISI IF = 20.6)
  71. **Lamkanfi M.**, Malireddi R. K. S., Kanneganti T-D. (2009). Fungal zymosan and mannan activate the Cryopyrin inflammasome. *Journal of Biological Chemistry* 284 (31):20574-81 (ISI IF = 5.3)
  72. Thomas P. G., Reynolds C., Aldridge J. R., Boyd K. I., **Lamkanfi M.**, Doherty P. C., Kanneganti T-D. (2009). NLRP3 (NALP3/CIAS1/Cryopyrin) mediates key innate responses to influenza A virus via the regulation of caspase-1. *Immunity* 30(4):566-75 (ISI IF = 20.6)
  73. Misaghi S., Ottosen S., Izrael-Tomasevic A., Arnott D., **Lamkanfi M.**, Lee J., Liu J., O'Rourke K., Dixit VM., Wilson AC. (2009). Association of the C-terminal ubiquitin hydrolase BAP1 with the cell cycle regulator HCF-1. *Molecular & Cellular Biology* 29(8):2181-92 (ISI IF = 6.1)
  74. **Lamkanfi M.**, Moreira L.O., Makenna P., Spierings D.C.L., Boyd K., Murray P.J., Green D.R. Kanneganti T-D. (2009). Caspase-7 deficiency protects from endotoxin-induced lymphocyte apoptosis and improves survival. *Blood* 113(12):2742-5. (ISI IF = 10.6)
  75. **Lamkanfi M.**, Dixit V. M. (2009). Inflammasomes: guardians of cytosolic sanctity. *Immunological Reviews* 227: 95-105 (ISI IF = 10.1)
  76. Yvan-Charvet L., Welch C., Pagler T., Ranalletta M., **Lamkanfi M.**, Han S., Ishibashi M., Li R., Wang N., Tall A. R. (2008). Increased inflammatory gene expression in ABC Transporter-deficient macrophages. Free cholesterol accumulation, increased signaling via Toll-like receptor, and neutrophil infiltration of atherosclerotic lesions. *Circulation* 118: 1837-1847 (ISI IF = 14.6)
  77. **Lamkanfi M.\***, Kanneganti TD.\*., Vandamme P., Vanden Berghe T., Vanoverberghe I., Vandekerckhove J., Vandenabeele P., Gevaert K., Núñez G. (\*Contributed equally) (2008). Targeted peptide-centric proteomics reveals caspase-7 as a substrate of the caspase-1 inflammasomes. *Molecular & Cellular Proteomics* 7: 2350-2363 (ISI IF = 8.8)
  78. Vande Walle L., **Lamkanfi M.**, Vandenabeele P. (2008). The mitochondrial serine protease HtrA2/Omi: an overview. *Cell Death and Differentiation* 15: 453-460. (ISI IF = 7.5)
  79. Kersse K., Vanden Berghe T., **Lamkanfi M.**, Vandenabeele P. (2007). A phylogenetic and functional overview of inflammatory caspases and caspase-1-related CARD-only proteins. *Biochemical Society Transactions* 35: 1508-1511 (ISI IF = 3.4)
  80. Kanneganti TD., **Lamkanfi M.**, Núñez G. (2007). Intracellular NOD-Like receptors in host defence and disease. *Immunity* 27: 549-559 (ISI IF = 19.3)
  81. **Lamkanfi M.**, Amer A., Kanneganti TD., Munoz-Planillo R., Chen G., Vandenabeele P., Fortier A., Gros P., Núñez

- G. (2007). The NOD-Like receptor family member Naip5/Birc1e restricts *Legionella pneumophila* growth independently of caspase-1 activation. *Journal of Immunology* 178: 8022-8027 (ISI IF = 6.1)
82. **Lamkanfi M.**, Kanneganti TD., Franchi L., Núñez G. (2007). Caspase-1 Inflammasomes in Infection and Inflammation. *Journal of Leukocyte Biology* 82: 220-225 (ISI IF = 4.1)
83. Kanneganti TD.\*, **Lamkanfi M.\***, Park J-H., Chen G., Kim Y-G., Franchi L., Vandenabeele P., Núñez G. (\*Contributed equally) (2007). Pannexin-1-Mediated Recognition of Bacterial Molecules Activates the Cryopyrin Inflammasome Independent of Toll-Like Receptor Signaling. *Immunity* 24: 433-443 (ISI IF = 19.3)
84. Cornelis S., Kersse K., Festjens N., **Lamkanfi M.**, Vandenabeele P. (2007). Inflammatory caspases: Targets for novel therapies. *Current Pharmaceutical Design* 13: 365-383 (ISI IF = 4.9)
85. Vande Walle L.\*, Van Damme P.\* , **Lamkanfi M.**, Saelens X., Vandekerckhove J., Gevaert K., Vandenabeele P. (2007). Proteome-wide identification of HtrA2/Omi substrates. *Journal of Proteome Research* 6: 1006-1015. (\*Equally Sharing First Authorship) (ISI IF = 5.7)
86. **Lamkanfi M.**, Festjens N., Declercq W., Vanden Berghe T., Vandenabeele P. (2007). Caspases in cell survival, proliferation and differentiation. *Cell Death and Differentiation* 14: 44-55. (ISI IF = 8.3)
87. Festjens N., Cornelis S., **Lamkanfi M.**, Vandenabeele P. (2006). Caspase-containing complexes involved in the regulation of cell death and inflammation. *Biological Chemistry* 387: 1005-1016. (ISI IF = 2.8)
88. **Lamkanfi M.**, Declercq W., Vanden Berghe T., Vandenabeele P. (2006). Caspases leave the beaten track: caspase-mediated activation of NF- $\kappa$ B. *Journal of Cell Biology* 173: 165-171. (ISI IF = 10.2)
89. **Lamkanfi M.**, D'hondt K., Vande Walle L., van Gurp M., Denecker G., Demeulemeester J., Kalai M., Declercq W., Saelens X., Vandenabeele P. (2006). A novel caspase-2-complex containing TRAF2 and RIP1. *Journal of Biological Chemistry* 280: 6923-6932. (ISI IF = 5.8)
90. **Lamkanfi M.**, Denecker G., Kalai M., Meeus A., D'hondt K., Declercq W., Saelens X., Vandenabeele P. (2005). INCA: a novel human caspase recruitment domain protein that inhibits interleukin-1 $\beta$  generation. *Journal of Biological Chemistry* 279: 51729-51738. (ISI IF = 5.9)
91. **Lamkanfi M.**, Kalai M., Saelens X., Declercq W., Vandenabeele P. (2004). Caspase-1 activates nuclear factor of the kappa-enhancer in B cells independent of its enzymatic activity. *Journal of Biological Chemistry* 279: 24785-24793. (ISI IF = 6.4)
92. **Lamkanfi M.**, Kalai M., Vandenabeele P. (2004). Caspase-12: an overview; *Cell Death and Differentiation* 11: 365-368. (ISI IF = 8.2)
93. Kalai M., **Lamkanfi M.**, Denecker G., Boogmans M., Lippens S., Meeus A., Declercq W., Vandenabeele P. (2003). Regulation of the expression and processing of caspase-12. *Journal of Cell Biology* 162: 457-467. (ISI IF = 12.0)
94. **Lamkanfi M.**, Declercq W., Kalai M., Saelens X., Vandenabeele P. (2002). Alice in caspase land: a phylogenetic analysis of caspases from worm to man. *Cell Death and Differentiation* 9: 358-361. (ISI IF = 5.7)

#### BOOKS AND BOOK CHAPTERS

1. **Lamkanfi M.**, Declercq W., Depuydt B., Kalai M., Saelens X., Vandenabeele P. (2003). The caspase family; *In Caspases-Their Role in Cell Death and Cell Survival*. pp 1-40., (Los, M & Walczak, H, eds.), Georgetown/New York, Landes Bioscience/Kluwer Academic-Plenum Publishers.

#### DISSERTATIONS, MANUALS AND WEB PUBLICATIONS

1. **Lamkanfi M.** (2004). CARD Proteins in Apoptosis and Inflammation. Ghent University and Flanders Interuniversity Institute for Biotechnology, Ghent, Belgium. PhD Thesis. 261 pp
2. **Lamkanfi M.** (2000). Cloning, Expression, Purification and Characterization of recombinant Caspase-8 and non-cleavable mutants. Ghent University and Flanders Interuniversity Institute for Biotechnology, Ghent, Belgium. Master in Biochemistry Thesis. 130 pp
3. **Lamkanfi M.**, Vande Walle L., Kanneganti T-D. (2010). NOD-like receptors and inflammasomes in the immune response. *SciTopics*. Retrieved from [http://www.scitopics.com/NOD\\_like\\_receptors\\_and\\_inflammasomes\\_in\\_the\\_immune\\_response.html](http://www.scitopics.com/NOD_like_receptors_and_inflammasomes_in_the_immune_response.html)

#### PATENTS AND PATENT APPLICATIONS

1. European Publication Nr: EP 15184879.3  
Title: Means and methods for diagnosing familial Mediterranean fever  
Filed Date/Publication Date: September 11th, 2015  
Inventors: **Lamkanfi, M.**, Saavedra P., Van Gorp H.  
Applicants: VIB and Ghent University
2. International Publication Nr. WO 05025591  
Title: Caspase Derived CARDs  
Filed Date/Publication Date: September 17<sup>th</sup>, 2004/ March 24<sup>th</sup>, 2005  
Inventors: **Lamkanfi, M.**, Kalai M., Vandenabeele P.  
Applicants: Flanders Institute for Biotechnology (VIB) and Ghent University
3. International Publication Nr. WO 05118632  
Title: A novel human CARD-only protein that inhibits pro-IL-1 $\beta$  maturation  
Filed Date/Publication Date: May 25<sup>th</sup>, 2005/ December 15<sup>th</sup>, 2005  
Inventors: **Lamkanfi, M.**, Denecker G., Vandenabeele P.  
Applicants: Flanders Institute for Biotechnology (VIB) and Ghent University

#### HONORS AND AWARDS

2016	The Fund Baillet-Latour Grant for Medical Research
2015	Consolidator Grant of the European Research Council (ERC)
2014	AstraZeneca Foundation Prize for Auto-immune and Rheumatic diseases
2014	Co-organizer 1 <sup>st</sup> International Symposium on Mechanisms of Innate immunity, Cell Death and Inflammation, Ghent, Belgium (25-26 September 2014)
2013	Prize of the Flemish Scientific Foundation for Biomedical Sciences awarded by the Belgian Royal Academy of Medicine
2012	Starting Grant of the European Research Council (ERC)
2004	Travel and Accommodation Award of the European Cell Death Organisation (ECDO)
2004	Travel Award of the Belgian National Fund for Scientific Research (NFWO)
2002	Travel and Accommodation Award of the European Workshop on Cell Death
2002	Travel Award of the Belgian National Fund for Scientific Research (NFWO)

## EDITORIAL ACTIVITIES

### **Referee Funding agencies:**

Wilhelmina Children's Hospital Research Foundation of the University Medical Center Utrecht; Slovenian Research Agency; FNRS Wallonia; Fondazione Telethon Italy; Swiss National Science Foundation; Health Research Board Ireland Referee, Nature Reviews Rheumatology

### **Referee Journals:**

Nature; Science; Nature Medicine; Nature Immunology; Immunity; Cell Host Microbe; Nature Communications; PLoS Pathogens; Journal of Immunology; Cell Death and Differentiation; European Journal of Immunology; Molecular Cancer Research; Experimental Dermatology; Journal of Leukocyte Biology; International Archives of Allergy and Immunology; Autophagy; Critical Care

### **Editorial Activities:**

Occasional Editor Proceedings of the National Academy of Sciences (PNAS)

## COMMISSIONS AND JURY ACTIVITIES

2015 - Present	Member of the PhD commission of Matthias Vanderkerken, Department of Internal Medicine, Faculty of Medicine and Health Sciences, Ghent University
February 3 <sup>rd</sup> , 2016	Member, PhD examination Committee of Liesbeth Allais , Faculty of Medicine and Health Sciences, Ghent University
November 26, 2015	Member, PhD examination Committee of Audrey Gustin , Faculty of Sciences, Luxemburg University
October 14, 2015	Member, PhD examination Committee of Dinesh Babbu , Faculty of Medicine and Health Sciences, Ghent University
July 3, 2015	Member, PhD reading and Examination Committee of Yves Dondelinger , Faculty of Sciences, Ghent University
December 16, 2014	Member of the PhD reading and examination committee of Lindsey Devisscher, Faculty of Medicine and Health Sciences, Ghent University
2014-Present	Member of the Workgroup Animals Experiments of the ECD, Faculty of Medicine and Health Sciences, Ghent University
2014-Present	Member Ethical Committee on Animal Experiments (ECD), Faculty of Medicine and Health Sciences, Ghent University
2013-2015	Chair of the VIB Group Leader Committee
June 27 <sup>th</sup> , 2014	Member of the PhD examination committee of Tim Van Acker, Faculty of Medicine and Health Sciences, Ghent University
September 19 <sup>st</sup> , 2013	Member of the PhD reading committee of Rene Billingwe Ayiseh, Faculty of Sciences, Ghent University
June 27 <sup>st</sup> , 2013	Member of the PhD reading committee of Monique Willart, Faculty of Medicine and Health Sciences, Ghent University

May 31 <sup>st</sup> , 2013	Member of the PhD reading committee of Kim Plasman, Faculty of Medicine and Health Sciences, Ghent University
May 31 <sup>st</sup> , 2013	Member of the PhD reading committee of Connor McGuire, Faculty of Sciences, Ghent University
May 24 <sup>th</sup> , 2013	Member of the PhD reading committee and ‘Opponent’ of Sanna Nystrom, Center for Infectious Medicine, Karolinska Institute, Sweden
March 29 <sup>th</sup> , 2013	Member of the PhD reading committee of Davina Tondeleir, Faculty of Medicine and Health Sciences, Ghent University
December 13 <sup>th</sup> , 2012	Member of the PhD reading committee of Celia Bovyn, Department of Biomedical Molecular Biology, Faculty of Medicine and Health Sciences, Ghent University
2012-	Member of the PhD commission of Emmy Van Quickelberghe, Department of Biochemistry, Faculty of Medicine and Health Sciences, Ghent University
2010 - 2012	Member of VIB Group Leader Committee
2011-	Member of the PhD commission of Lei Deng, Department of Biomedical Molecular Biology, Faculty of Science, Ghent University
2010-	Member of the PhD commission of Jolien Hollebeke, Department of Biochemistry, Faculty of Medicine and Health Sciences, Ghent University
December 9 <sup>th</sup> , 2011	Member of the PhD reading committee of Mathias Fransen, Department of Biomedical Molecular Biology, Faculty of Sciences, Ghent University
April 8 <sup>th</sup> , 2011	Member of the PhD reading committee of Kristof Kersse, Department of Biomedical Molecular Biology, Faculty of Sciences, Ghent University
May 19 <sup>th</sup> , 2010	Member of PhD Dissertation Jury of Francis Impens, Department of Biochemistry, Ghent University; Studying in vitro and in vivo protease processing in models of cancer cell death and viral infection by N-terminal COFRADIC

#### UNIVERSITY TEACHING

2010 - Present	Co-lecturer <i>Medical Gene Technology</i> course, 3 <sup>rd</sup> Bachelor Biomedical Sciences, Faculty of Medicine and Health Sciences, Ghent University
2010 - Present	Co-lecturer <i>Molecular Immunology</i> course, 1 <sup>st</sup> Master Biomedical Sciences, Faculty of Medicine and Health Sciences, Ghent University

#### Master student Mentoring

2015 - 2016	Promotor Masterproef Naomi Van Laethem, 2e Master in de Biomedische Wetenschappen: Opheldering van de rol van het inflammatoire caspase-12 tijdens bacteriële infecties.
2015 - 2016	Promotor Masterproef Jens Valcke, 1e Master in de Biochemie en Biotechnologie : Cell death induction in NLRX1 KO cells
2014 - 2015	Promotor Masterproef Naomi Van Laethem, 1e Master in de Biomedische Wetenschappen: Opheldering van de rol van het inflammatoire caspase-12 tijdens bacteriële infecties.
2014 - 2015	Promotor Masterproef Mattieu Kint, 2e MASTER IN DE BIOCHEMIE EN BIOTECHNOLOGIE: Investigating the mechanisms of inflammasome activation in response to <i>Vibrio cholerae</i> infection.

2014 - 2015	Promotor Masterproef Ine Jehaes, 2e MASTER IN DE BIOCHEMIE EN BIOTECHNOLOGIE : Role of NOD-like Receptor NLRP9b in early embryonic development and immunity
2014 - 2015	Promotor Z-lijn paper Justine De Paepe, 2nd Bachelor Medicine : NOD-like Receptoren in relatie tot autoinflammatoire ziekten
2014 - 2015	Promotor Z-lijn paper Nick De Wever, 2nd Bachelor Medicine : NOD-like Receptoren in relatie tot autoinflammatoire ziekten
2013 - 2014	Promotor MASTERPROEF Jeroen Creytens, 1e MASTER IN DE BIOCHEMIE EN BIOTECHNOLOGIE): DE ROL VAN INFLAMMASOMEN IN IMMUUN HOMEOSTASE VAN DE DARM IN DE MUIS
2013 - 2014	Promotor MASTERPROEF Renate Wanner, 1e MASTER BIOMEDICAL BIOTECHNOLOGY): ATPase activity of NOD-like receptor 12 (NLRP12)
2013 - 2014	Promotor MASTERPROEF Noortje Gemoets, 2e MASTER IN DE BIOCHEMIE EN BIOTECHNOLOGIE): Samenstelling en subcellulaire lokalisatie van het Nlrp1b inflammasoom in anthrax toxine-behandelde macrofagen
2012 - 2013	Promotor MASTERPROEF Noortje Gemoets, 1e MASTER IN DE BIOCHEMIE EN BIOTECHNOLOGIE): Samenstelling en subcellulaire lokalisatie van het Nlrp1b inflammasoom in anthrax toxine-behandelde macrofagen
2012 - 2013	Promotor MASTERPROEF Karen Segaert, 2e MASTER IN DE BIOMEDISCHE WETENSCHAPPEN): Functionele en moleculaire karakterisering van het cysteine protease caspase-11 in de immuun signalisatie

#### PhD student Mentoring

2013 - Present	Promotor Nathalia Vasconcelos
2013 - Present	Promotor Michail Mamantopoulos
2013 - Present	Promotor Hanne Dubois
2013 - Present	Promotor Pedro Saveedra
2012 - Present	Promotor Daniel Jimenez Fernandez
2012 - Present	Promotor Magdalena Matusiak (Defense on 19-10-2015): <i>CARD-only and NAIP proteins in inflammasome signaling</i>

#### Post-doctoral fellow Mentoring

2015 - Present	Dr. Magdalena Matusiak
2014 - Present	Dr. Filip Van Hauwermeiren
2013 - Present	Dr. Hanne Van Gorp
2013 - Present	Dr. Andy Wullaert
2013 - Present	Dr. Anna Kuchmiy
2012 - Present	Dr. Nina Van Opdenbosch

2012 - Present	Dr. Dieter Demon
2011 - Present	Dr. Lieselotte Vande Walle

### INVITED LECTURES

- January 15, 2016      *Department of Structural Biology, VIB/Free University Brussels, Belgium*
- January 6, 2016      *Department of Biochemistry - SFB 796, University of Erlangen, Germany*
- November 9, 2015      *Cell Conference on Cell Death and Inflammation, Berkeley, CA, USA*
- November 5, 2015      *2015 American College of Rheumatology Meeting, San Francisco, CA, USA*
- October 2, 2015      *8th International Congress of Familial Mediterranean Fever and Systemic Autoinflammatory Diseases, Dresden, Germany. Inflammasomes in inflammatory disease*
- September 18-20, 2015    *EuTrain/TripR Conference: From Bench to Bedside (and back again) in Pediatric Rheumatology, Genova, Italy.*
- March 25, 2015      *Weatherall Institute of Molecular Medicine, John Radcliffe Hospital, MRC Human Immunology Unit, University of Oxford, UK*
- February 23, 2015      *Institute of Immunology, University of Munster, Germany*
- December 4, 2014      *Department of Autoimmunity, Transplantation and Inflammation Disease, Novartis Pharma AG, Basel, Switzerland*
- October 2, 2014      *Department of Immunology, University of Glasgow, Glasgow, UK*
- September 25-26, 2014    *1<sup>st</sup> International Symposium on Mechanisms of Innate immunity, Cell Death and Inflammation, Ghent, Belgium*
- September 6-10, 2014     *14<sup>th</sup> International Symposium on Proteinases, Inhibitors and Biological Control, Portoroz, Slovenia*
- June 4, 2014      *11<sup>th</sup> International Conference on Innate Immunity, Olympia, Greece*
- April 29, 2014      *Annual VIB seminar; Blankenberge, Belgium, April 28-30<sup>th</sup>, 2014.*
- December 11, 2013     *International Symposium on Cell Death and Immunity, Cologne, Germany*
- October 7-9, 2013     *5<sup>th</sup> Meeting of the Moroccan Society of Immunology, Rabat, Morocco*

October 2-6, 2013

First School of Immunogenetics, Faculty of Sciences, University Mohamed V-Agdal, University of Rabat, Morocco

June 7, 2013

Symposium on Clinical Immunology, ICC Ghent, Belgium

May 23, 2013

Center for Infectious Medicine, Karolinska Institutet, Stockholm, Sweden

March 12, 2013

VIB Center for the Biology of Disease & K.U. Leuven Center for Human Genetics, March 12, 2013, Leuven, Belgium.

2012

Annual VIB seminar; Blankenberge, Belgium, April 18-20<sup>th</sup>, 2012.

2011

University Clinic Carl Gustav Carus, Technical University Dresden, October 6, 2011, Dresden, Germany.

2011

Center for Infection and Immunity, Institut Pasteur de Lille, February 1, 2011, Lille, France.

2009

Department of Medical Protein Research; January 9<sup>th</sup>, 2009, Ghent, Belgium.

2007

*Annual Immunology Retreat*; May 15<sup>th</sup>, 2007, Ann Arbor, MI, USA.

2007

Genentech; May 4<sup>th</sup>, 2007, San Francisco, CA, USA.

2007

Department of Molecular Biomedical Research Seminar Series; March 12<sup>th</sup>, 2007, Ghent, Belgium.