

CURRICULUM VITAE: Alain JACQUET

WORK ADDRESS:

Chulalongkorn University,
Vaccine Research Center
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NAME: Alain. Jacquet

BORN: February 13, 1965, Ixelles, Belgium

CITIZENSHIP: Belgian

MARITAL STATUS: Single

EDUCATIONS:

1986-1989 Ph. D. in Chemistry. Option Biochemistry
Mention "Grande Distinction".
Université Libre de Bruxelles, Department of General Chemistry

1982-1986 Licence in chemistry. Option Biochemistry
Mention "Grande Distinction".
A belgian licence degree is roughly equivalent to a master's degree in chemistry
Université Libre de Bruxelles,

APPOINTMENTS:

From 1989 to march 2009: Principal investigator of the Laboratory of Experimental Allergy (formerly Department of Applied Genetics). Associate Professor at ULB.
Université Libre de Bruxelles
Institut de Biologie et de Médecine Moléculaires
Laboratoire d'Allergologie Expérimentale
Design of recombinant vaccines against infectious diseases and since 1999, against house dust mite allergy.

Since april 2009: Associate Professor at Chulalongkorn University. Principal investigator and Group leader of the Recombinant Vaccine Unit of the Division of Allergy and Clinical Immunology (Prof. Kiat Ruxrungtham, M.D.).
Design of recombinant vaccine against house dust mite allergy.

TEACHING AT ULB

BIMO 024 – Animal Cell Cultures : Principles and Applications (15h), lecture followed by bioengineer students:

BIOL-F-412 – Animal Biotechnology (12h), lecture followed by bioengineer students, students of master in molecular or animal biology:

CHIM-H-307- Introduction to living world (24h), lecture followed by engineer students

BING-F-500- Complement of Biotechnology (including Protein purification and vectorology) (24h), lecture followed by bioengineer students

TEACHING AT CHULALONGKORN

Principle and Techniques in Molecular Biology- 2005707

Recombinant protein expression and protein purification (6h)

Animal Biotechnology (2h)

Cellular and Molecular Biology- 3700501

From DNA to protein (3h)

Immune system (3h)

Basic and Applied Immunology-2011703

Th differentiation (2h)

Allergic response and the new immunotherapeutic treatments (3h)

Cancer Immunotherapy (3h)

Medical Immunology- 3004791

Allergy and Immunotherapeutic treatments (2h)

Advanced Immunology-3004741

Immunomodulation of the allergic responses (3h)

Basic Research Methods in Cell Biology-3001743

Protein study methods (4h)

Research Orientation in Medical Microbiology-2005706

How to conduct a basic science research project? (2h)

Research Skills in Biomedical Sciences and Biotechnology-3000751

Protein separation and purification (5h)

Cell line cultures (5h)

Immunogenetics-3004329 (start in 2014)

Concept of Allergy vaccine (4h)

Molecular and Cellular Biotechnology—3000736 (30h)

Protein Expression and Purification – 3000757 (30h)

Protein Biochemistry- 3000763 (30h)

Research Training Program in Biomedical Science (Meeting)

Study Design/Methodology

WORKSHOP ORGANIZATION:

Co-chairman and main instructor of the International Workshop on Protein Expression and Purification Strategies (Chulalongkorn University, Faculty of Medicine, Bangkok, Thailand, September 2010, October 2011, 2012, 2013 and 2014)

REVIEWER.

Reviewer for International Archives of Allergy and Immunology, Allergy, Clinical and Experimental Allergy, Asian Pacific Journal of Allergy and Immunology, Experimental Dermatology, PloS.

TECHNOLOGICAL EXPERTISE

Protein biochemistry (SDS-PAGE, Western blot, Glycosylation characterization, enzymatic digestion, protein assays, ...), Protein purification (any type of liquid chromatography including FPLC, ultrafiltration, precipitation, concentration, ...), Recombinant protein expression (in E.coli, yeast, insect and mammalian cells), animal cell culture (mammalian cell lines as well as primary immune cells), large scale cell culture in bioreactors, Recombinant DNA technology (cloning, PCR, sequencing), Immune assays: ELISA for antibody titer determinations, competition ELISA, Cytokine assays, T-cell reactivity, Dendritic cell activation, Basophil activation, Animal model of allergy, Airway hyperresponsiveness measurement, Bronchoalveolar lavage, Protein and naked DNA vaccination (formulation with adjuvants),.....

INTERNATIONAL MEETINGS

1) Meeting of the Société Royale de Chimie.

Poster Presentation (Bruxelles, May 1987).

T.Dubois, **A.Jacquet**, J.Monin and Y.Looze.

Fractionnement et caractérisation des constituants protéolytiques du latex de *Carica papaya* L.

2) XVth Forum des Jeunes Chercheurs.

Poster Presentation (Orsay, France, September 1988).

A.Jacquet, T.Kleinschmidt, A.G.Schnek, Y.Looze and G.Braunitzer.

La séquence en acides aminés de la chymopapaïne extraite du latex de *Carica papaya* L.

3) Meeting of the Société Royale de Chimie.

Poster Presentation (Liège, January 1991).

A.Jacquet, N.Moguilevsky, L.Garcia-Quintana, C.Tournay and A.Bollen.

Purification and physico-chemical characterization of human recombinant myeloperoxidase (part I).

4) 2nd International Conference on Advances in Purification of Recombinant Proteins. Poster presentation.(Interlaken, Switzerland, March 1991).

A.Jacquet, N.Moguilevsky, L.Garcia-Quintana, C.Tournay and A.Bollen.

Purification and physico-chemical characterization of human recombinant myeloperoxidase (part II).

- 5) Bio-Chromatography and Molecular Biology
Oral presentation. (La Grande Motte, France, May 1992)
A.Jacquet, V.Deleersnyder, L.Garcia-Quintana, N.Moguilevsky and A.Bollen.
Investigation of the active site of recombinant human myeloperoxidase by site-directed mutagenesis.
- 6) FNRS-NFWO Contact Group: " Structure and function of proteins".
Oral presentation. (Bruxelles, October 1992).
A.Jacquet, T.Dubois, A.G.Schnek and Y.Looze.
Structure-function relationships in the cysteine proteinase of *Carica papaya* latex.
- 7) Miami 1993 Bio/Technology Winter Symposia. Advances in gene technology.
Protein Engineering and Beyond.
Poster presentation (Miami, U.S.A., January 1993).
A.Jacquet, V.Deleersnyder, L.Garcia-Quintana, R.E.Fenna, A.Bollen and N.Moguilevsky.
Characterization of two heme active-site mutants of human myeloperoxidase, His261→Ala and Asp260→Asn.
- 8) The Second International Conference On The Varicella-Zoster Virus.
Two poster presentations. (Paris, France, July 1994).
A.Jacquet, M.Massaer, M.Haumont, V.Dellersnyder, A.Bollen and P.Jacobs.
VZV gpII produced by CHO cells interact with lipids to form large particles.
- M.Haumont, M.Massaer, **A.Jacquet**, V.Dellersnyder, A.Bollen and P.Jacobs.
Immunogenicity of recombinant anchor-less VZV gpII secreted by and purified from Chinese hamster ovary cells.
- 9) Miami 1995 Bio/Technology Winter Symposium. Advances in gene technology.
Protein Engineering and Structural Biology.
Poster presentation. (Miami, U.S.A., February 1995).
C.Davey, **A.Jacquet**, N.Moguilevsky and R.E.Fenna.
Characterization of the heme-protein covalent bonds in human myeloperoxidase by X-ray crystallography and site directed mutagenesis.
- 10) The First European Meeting of Virology.
Poster presentation. (Würzburg, Germany, September 1995)
A.Jacquet, M.Haumont, M.Massaer, A.Bollen and P.Jacobs.
Initial interaction between varicella-zoster virus and MRC 5 cells is mediated by heparan and dermatan sulfate.
- 11) Xth International Congress of Virology.
Poster presentation. (Jerusalem, Israël, August 1996).
M.Haumont, **A.Jacquet**, M.Massaer, C.Bruck, A.Bollen and P.Jacobs.
Evaluation of the neutralizing antibody response induced by varicella-zoster virus gE and gB glycoproteins following natural infection.
- 12) 2nd Colloquium U.L.B.-Lille.
Poster presentation. (U.L.B., Campus Erasme, January 1997).
A.Jacquet, M.Haumont, D.Chellun, F.Tufaro, A.Bollen and P.Jacobs.

Rôle des glycoprotéines B et E du virus de la varicelle et du zona dans son attachement à la surface cellulaire.

13) Current Topics in Gene Expression Systems

Poster presentation (San Diego, U.S.A., November 1997)

J.Duclos, A.Fauconnier, A.Cravador, **A.Jacquet**, A.Bollen, E.Godfroid and R.Biemans.

Expression in *Pichia pastoris* and the study of the necrotic activity of β -cinnamomin, a basic elicitor secreted by *Phytophthora cinnamomi*.

14) XVIIIth International Symposium on Separation of Proteins, Peptides and Polynucleotides

Poster presentation (Vienna, Austria, November 1998)

A.Jacquet, V.Daminet, M.Haumont, A.Bollen and R.Biemans.

Solubility of ROP2, a *T.gondii* antigen, expressed in *E.coli* is enhanced by fusion to maltose binding protein

15) Biotechnologia Habana 98

Poster presentation (La Havana, Cuba, November 1998)

E.Misawa, M.Heinderyckx, **A.Jacquet**, P.Jacobs and A.Bollen.

High cell density fed-batch fermentation of recombinant *Pichia pastoris* Mut⁺ strain expressing the E7 protein from human papilloma virus type 16.

16) The XVIIIth Congress of the European Academy of Allergology and Clinical Immunology

Oral presentation (Bruxelles, Belgium, July 1999)

A.Jacquet, M.Massaer, L.Mazzu, V.Daminet, M.Haumont, L.Garcia, P.Jacobs and A.Bollen.

Purification and characterization of secreted house dust mite allergen ProDer p 1 produced in *Drosophila* cells.

17) The XIXth Congress of the European Academy of Allergology and Clinical Immunology

Poster presentation selected for discussion (Lisbon, Portugal, July 2000)

A.Jacquet, M.Massaer, L.Mazzu, V.Daminet, M.Haumont and A.Bollen.

Codon optimization for high-level expressions of allergens : application to Der p 1.

18) International Conference on Allergy and Clinical Immunology- 2000

Poster presentation (Sydney, Australia, October 2000)

L.Vailes, K.Ichikawa, A.Pomes, E.Best, M.McDermott, **A.Jacquet** and M.Chapman.

Recombinant allergens as diagnostics : correlation with IgE antibody to natural allergens

19) Meeting of the Belgian Immunological Society

Poster presentation (Gosselies, November 2000)

M.Haumont, L.Delhaye, L.Garcia, M.Jurado, L.Mazzu, V.Daminet, A.Bollen and **A.Jacquet**.

Original guinea pig model for the study of protective immunity against congenital toxoplasmosis.

20) 57th Annual Meeting of the American Academy of Allergy, Asthma and Immunology

Two poster presentations (New Orleans, U.S.A., March 2001)

A.Jacquet, M.Massaer, M.Haumont, L.Mazzu, V.Daminet, and A.Bollen.

Conversion of ProDer p 1 into mature Der p 1 is an autocatalytic processing which is dependent of the cysteine proteinase activity of the allergen.

L.Vailes, K.Ichikawa, A.Pomes, A.Smith, E.Best, M.McDermott, **A.Jacquet**, and M.Chapman

Validation of recombinant allergens: ELISA reactivity, IgE antibody binding, and skin test reactivity.

21) 17th Meeting of the European Society of Animal Cell Technology

Poster presentation (Tylösand, Suède, June 2001)

L.Coulon, O. Bel Haj Touzani, M. Magi, A. Bollen, R. Hanus and **A. Jacquet**

Production of recombinant allergen ProDer p 1 by CHO cells adapted to growth in serum-free suspension culture.

22) 9th Conference on Retroviruses and Opportunistic Infections

Poster presentation (Seattle, U.S.A., February 2002)

J.M. Miro, M. Lejeune, X. Claramonte, E. Martínez, E. Ribera, J. Arrizabalaga, J.R. Arribas, P. Domingo, E. Ferrer, F. García, M. Plana, M.E. Valls, D. Podzamczar, T. Pumarola, **A. Jacquet**, J. Mallolas, T. Gallart and J.M. Gatell.

Toxoplasma gondii-Specific T-Cell Responses Are Restored in AIDS Patients who Discontinued Toxoplasma Encephalitis (TE) Secondary Prophylaxis (PS) after Immunological Reconstitution due to Potent Antiretroviral Therapy (HAART).

23) XXI Congress of the European Academy of Allergology and Clinical Immunology (EAACI 2002, Naples, Italy, June 2002)

Two poster presentations

Genetic vaccination with plasmid DNA encoding ProDer p 1 prevents the induction of immunoglobulin E synthesis and airway eosinophilia in mice challenged with aerosolized allergen **A. Jacquet**, M. Magi, L. Garcia, M. Haumont and A. Bollen.

Prevention of allergen-specific IgE production and airway eosinophilia by vaccination with recombinant ProDer p 1 combined with diC14-amidine.

A. Jacquet, M. Vandenbranden, Mauro Magi, A. El Ouahabi, L. Garcia, A. Bollen and J.-M. Ruyschaert.

24) Meeting of the Belgian Association for Cancer Research – Signalling pathways in malignancy (Leuven, January 2003)

Poster presentation

Protein-based immunization against cervical cancer: induction of antigen-specific and anti-tumor immunity with a deleted HPV16 E7 protein produced in *Pichia pastoris*.

S. Hallez, J.-M. Brulet, C. Vandooren, C. Giannouli, F. Gesche, F. Maudoux, A. Bollen, A. Burny, R. Wattiez and **A. Jacquet**.

25) HPV vaccines and immunotherapies (Cambridge, UK, March 2003). Poster presentation.

Immunization with a deleted HPV16 E7 protein produced in *Pichia pastoris* generates E7-specific immunity and anti-tumour effects in mice.

S. Hallez, J.-M. Brulet, C. Vandooren, F. Gesche, F. Maudoux, A. Bollen, A. Burny, R. Wattiez and **A. Jacquet**.

26) XVIII International Congress of Allergy and Clinical Immunology (XVIII ICACI, Vancouver, Canada, September 2003)

Oral presentation

Heat-denaturation of recombinant ProDer p 1: consequences for its structural and allergenic properties.

M. Magi, L. Garcia, M. Vandenbranden and **A. Jacquet**

Poster presentation

Influence of disulfide bridges to the IgE reactivity of the house dust mite allergen Der p 1.
M. Magi, M. Vandenbranden, M. Haumont, L. Garcia and **A. Jacquet**.

27) 60th Annual Meeting of the American Academy of Allergy, Asthma and Immunology (60th AAAAI, San Francisco, U.S.A., march 2004)

Oral presentation

E. Adam, L. Coulon, E. Jaumotte, X. Duhant, M.D. Hollenberg and **A. Jacquet**. The House Dust Mite Protease Allergen Der p 1 Induced IL-8 Production in Human Airway Epithelial Cells through Activation of ERK1/2 Mitogen-Activated Protein Kinase and AP-1 Signalling Pathways.

28) XXIII Congress of the European Academy of Allergology and Clinical Immunology (EAACI 2004, Amsterdam, The Netherlands, June 2004).

Poster presentation

High-level expression, purification and characterization of recombinant ProDer p 3.
M. Magi and **A. Jacquet**.

29) 61th Annual Meeting of the American Academy of Allergy, Asthma and Immunology (61th AAAAI, San Antonio, U.S.A., march 2005)

Poster presentation.

Intranasal co-application of lactic acid bacteria (LAB) and Der p 1 promotes a prophylactic Th1 response in a murine model of house dust mite allergy.

M. Hisbergues, M. Magi, L. Garcia, B. Pot, J. Pestel and **A. Jacquet**.

30) Cell Signaling World 2006 (Luxembourg, Luxembourg, january 2006)

Poster presentation

DiC14-amidine cationic lipid induces the production of IL-12 by murine bone-marrow derived dendritic cells: importance of TLR-4 and JNK.

T. Tanaka, M. Vandenbranden, J.-M. Ruyschaert and **A. Jacquet**.

31) 62th Annual Meeting of the American Academy of Allergy, Asthma and Immunology (62th AAAAI, Miami, U.S.A., march 2006)

Poster presentation

Immunomodulatory Properties of Recombinant Lactic Acid Bacteria Encoding a Major House-dust Mite Allergen

P. Rigaux, C. Daniel, C. Ratajczak, B. Pot, J. Pestel and **A. Jacquet**

32) XXV Congress of the European Academy of Allergology and Clinical Immunology (EAACI 2006, Vienna, Austria, June 2006).

Two poster presentations

Mapping of the IgE binding epitopes of the major house dust mite allergen Der p 1.

D. Walgraffe, C. Mattéotti, L. Garcia and **A. Jacquet**.

Absence of IgE epitopes by prokaryotic expression of the major house dust mite allergen, Der p 1.

D. Walgraffe, M. El Bakkoury and **A. Jacquet**

33) 16th European Congress of Immunology (ECI 2006, Paris, September 2006)

Two poster presentations

The lactic acid bacteria *L. plantarum* induced IL-12 and IL-10 production by dendritic cells

through a TLR2-dependent and DC-SIGN independent mechanism.

J. Steuve, P. Rigaux, S. Konstantinov, B. Pot, J. Pestel and **A. Jacquet**.

Immunomodulatory activities of recombinant lactic acid bacteria producing Der p 1 allergen

P. Rigaux, C. Daniel, M. Hisbergues, C. Ratajzack, B. Pot, **A. Jacquet** and J. Pestel

34) XXVI Congress of the European Academy of Allergology and Clinical Immunology (EAACI 2007 Göteborg, Sweden, June 2007).

Poster presentation

Immunomodulation of house dust mite allergy by a recombinant lactic acid bacteria producing Der p 1

P. Rigaux, C. Daniel, B. Pot, J. Pestel & **A. Jacquet**

35) 13th International Congress of Mucosal Immunology (ICMI2007, Tokyo, Japan, July 2007)

Oral presentation

New *L. plantarum*-based vaccine against house dust mite allergy.

A. Jacquet, M. Hisbergues, M. Magi, P. Rigaux, J. Steuve, L. Garcia, D. Goudercourt, B. Pot, J. Pestel.

36) World Allergy Congress 2007 (WAC2007, Bangkok, Thailand, December 2007).

Poster presentation

Vaccinations with recombinant ProDer p 1 produced in *E. coli* prevent the development of house dust mite allergy.

D. Walgraffe, C. Mattéoti, C. Marchand, L. Garcia, M. Vandenbranden and **A. Jacquet**

37) Vaccine 3rd Global Congress (Singapore, Singapore, October 2009)

Poster presentation

The immunomodulatory properties of *Lactobacillus plantarum* are dependent on CD14, NOD2 and MAPK.

P. Rigaux, E. Adam, C Bouillot, JG Magalhaes, D Philpott and **A Jacquet**.

38) Allergen Vaccines 2009 (Varadero, Cuba, October 2009)

Oral presentation

Immunomodulatory properties of probiotics in the context of house dust mite allergy.

A. Jacquet

39) XXVth Annual Meeting of The Allergy Asthma & Immunology Association of Thailand (Bangkok, October 2009).

Oral presentation.

Immunological aspect of allergic mechanisms.

A. Jacquet

40) International House Dust Mite Workshop Program (Mahidol U, Bangkok, January 2010).

Oral Presentation.

New insights into the molecular basis of the house dust mite-induced allergic response.

A. Jacquet

41) 14th International Congress of Immunology (Kobe, Japan, August 2010).

Poster presentation

Immunomodulatory properties of *E. coli* Nissle 1917 in the context of house dust mite allergy.

E. Adam, L. Delbrassine, C. Bouillot, V. Reynders, A.-C. Mailleux, E. Muraille and **A. Jacquet**

42) XXX Congress of the European Academy of Allergology and Clinical Immunology (EAACI 2011, Istanbul, Turkey, June 2011).

Poster Presentation

Enhanced Immunogenicity of House Dust Mite DNA vaccine through Antigen Targeting to Dendritic Cells. P. Pitakpolrat, P. Pulsawat, E. Prompetchara, D. Hannaman, K. Ruxrungtham and **A. Jacquet**.

43) Joint Conference in Medical Science (Bangkok, June 2011).

Poster presentation.

Enhanced Immunogenicity of House Dust Mite DNA vaccine through Antigen Targeting to Dendritic Cells. P. Pitakpolrat, P. Pulsawat, E. Prompetchara, D. Hannaman, K. Ruxrungtham and **A. Jacquet**.

44) Immunology Interhospital Conference (Chulalongkorn University, Bangkok, Thailand, August 2011).

Oral Presentation

Characterization of the house dust mite-induced allergic response and new specific immunotherapies. **A. Jacquet**

45) NRU Summit 2012 (Bangkok, April 2012).

Poster presentation.

Design Of DNA Vaccines Against House Dust Mite Allergy. **A. Jacquet**

46) XXXI Congress of the European Academy of Allergology and Clinical Immunology (EAACI 2012, Geneva, Switzerland, June 2012).

Two Poster Presentations

Prevention of HDM allergy elicited by a recombinant DNA vaccine encoding Der p 2 and delivered by *in vivo* electroporation. P. Pitakpolrat, P. Pulsawat, E. Prompetchara, D. Hannaman, K. Ruxrungtham and **A. Jacquet**.

Analysis of the allergenicity of natural and recombinant Der p 3

A. Bouaziz, V. Campisi, J. Herman, L. Garcia, D. Walgraffe, E. Adam, **A. Jacquet**, F. Hentges, R. Louis, M. Galleni and M. Dumez.

47) XXXII Congress of the European Academy of Allergology and Clinical Immunology-World Allergy Organization Joint Meeting (EAACI-WAO 2013, Milan, Italy, June 2013).

Poster Presentation

Characterization of the house dust mite allergen Der p 21 produced in *P.pastoris*. M. Theeraapisakkun, E. Nony, P. Pulsawat, M. Le Mignon, J. Wongpiyabovorn, K. Ruxrungtham, **A. Jacquet**

48) Meeting of the Thailand Leptospirosis Society (Bangkok, Thailand, July 2013).

Poster presentation.

Immunogenicity of DNA Vaccine encoding Loa22 fused to Single chain antibody to DEC205 (ScFv205). A. Buaklin, T. Palaga, N. Sangjun, P. Komane, **A. Jacquet**, K. Patarakul

47) XXXIII Congress of the European Academy of Allergology and Clinical Immunology (EAACI 2014, Copenhagen, Denmark, June 2014).

Poster Presentation

Proteomic analysis of the house dust mite allergen Der p 23 produced in *Pichia pastoris*. W. T. Soh, E. Nony, M. Le Mignon, K. Ruxrungtham, **A. Jacquet**

48) International Symposium of Molecular Allergology (ISMA 2013, Vienna, Austria, December 2013)

Oral presentation

Innate immunity and house dust mite allergy

A. Jacquet

49) Rencontres Francophones d'Allergologie Moléculaire (Paris, November 2014)

Oral presentation

Role of Innate Immunity in the HDM allergy

A. Jacquet

50) XXXIV Congress of the European Academy of Allergology and Clinical Immunology (EAACI 2015, Barcelona, Spain, June 2015).

Poster Discussion Presentation

Physico-chemical and lipid-binding characterization of the house dust mite allergen Der p 13 produced in *Pichia pastoris*.

P. Satitsuksanoa, E. Nony, P. Pulsawat, S. Piboonpocanun, M. Kennedy, **A. Jacquet**

51) XXIV World Allergy Congress (WAC 2015, Seoul, South Korea, October 2015)

Three Poster presentations

Cloning and expression of recombinant *Blomia tropicalis* dust mite allergen Blo t 7.

A. Buaklin, N. Malainual, **A. Jacquet**

Der p 23: a major house dust mite allergen in spite of limited release from fecal pellets and prominent protease sensitivity.

W. T. Soh, E. Nony, M. Le Mignon, K. Ruxrungtham, **A. Jacquet**.

The fatty acid binding protein Der p 13 is a minor house dust mite allergen able to activate innate immunity.

P. Satitsuksanoa, N. Suratannon, J. Wongpiyabovorn, P. Chatchatee, K. Ruxrungtham, **A. Jacquet**, HDM IgE mapping consortium.

PUBLICATIONS

1) I. Fractionation, purification and preliminary characterization.

T. Dubois, **A. Jacquet**, A. G. Schnek and Y. Looze, (1988),

Biol. Chem. Hoppe-Seyler, **369**, 733-740.

2) III. The primary structure of chymopapain.

A. Jacquet, T. Kleinschmidt, A. G. Schnek, Y. Looze and G. Braunitzer, (1989),

Biol. Chem. Hoppe-Seyler, **370**, 425-434.

3) IV. Proteolytic specificities of chymopapain and papaya proteinase Ω determined by digestion of α -globin chains.

A.Jacquet, T.Kleinschmidt, T.Dubois, A.G.Schnek, Y.Looze and G.Braunitzer, (1989), Biol.Chem. Hoppe-Seyler, **370**, 818-828.

4)Structural and biological properties of human recombinant myeloperoxidase produced by Chinese Hamster Ovary cell lines.

N.Moguilevsky, L.Garcia-Quintana, **A.Jacquet**, Ch.Tournay, L.Fabry, L.Piérard and A.Bollen, (1991), Eur.J.Biochem., **197**, 605-614.

5)Spectral and enzymatic properties of human recombinant myeloperoxidase: comparison with the mature enzyme.

A.Jacquet, C.Deby, M.Mathy, N.Moguilevsky, G.Deby-Dupont, A.Thirion, E.Goormaghtigh, L.Garcia-Quintana, A.Bollen and J.Pincemail, (1991), Arch.Biochem.Biophys., **291**, 132-138.

6)Site-directed mutants of human myeloperoxidase: a topological approach to the heme-binding Site.

A.Jacquet, V.Deleersnyder, L.Garcia-Quintana, A.Bollen and N.Moguilevsky, (1992),FEBS Lett., **302**, 189-191.

7)Site-directed mutagenesis of human myeloperoxidase: further identification of residues involved in catalytic activity and heme interaction.

A.Jacquet, L.Garcia-Quintana, V.Deleersnyder, R.Fenna, A.Bollen and N.Moguilevsky., (1994), Biochem.Biophys.Res.Comm., **202**, 73-81.

8)Purification and characterization of recombinant Varicella-Zoster virus glycoprotein gpII, secreted by chinese hamster ovary cells.

A.Jacquet, M.Massaer, M.Haumont, S.Houard, V.Deleersnyder, M.Place, A.Bollen and P.Jacobs,(1995), Protein expression and purification, **6**, 91-98.

9)Heme-protein in myeloperoxidase: modification of spectroscopic properties and catalytic activity by single residue mutation.

R.Floris, N.Moguilevsky, G.Puppels, **A.Jacquet**, R.Renirie, A.Bollen and R.Weaver, (1995), J.Am.Chem.Soc, **117**, 3907-3912.

10)Purification, characterization and immunogenicity of recombinant Varicella-Zoster virus glycoprotein gE secreted by chinese hamster ovary cells.

M.Haumont, **A.Jacquet**, M.Massaer, V.Deleersnyder, P.Mazzu, A.Bollen and P.Jacobs,(1996), Virus Research, **40**, 199-204.

11)Uptake of recombinant myeloperoxidase, free or fused to Fcγ, by macrophages enhances killing activity toward micro-organisms.

C.Tournay, P.J.Courtoy, L.Marodi, P.Totté, J.Werenne, **A.Jacquet**, L.Garcia-Quintana, A.Bollen and N.Moguilevsky, (1996), DNA and Cell Biology, **8**, 617-624.

12)Neutralizing antibody responses induced by varicella-zoster virus gE and gB glycoproteins following infection, reactivation or immunization.

M. Haumont, M. Jurdan, H. Kangro, **A. Jacquet**, M. Massaer, V. Deleersnyder, L. Garcia, A. Bosseloir, C. Bruck, A. Bollen and P. Jacobs, (1997), J. Med. Virol, **53**, 63-68.

13)The varicella zoster virus glycoprotein B (gB) plays a role in virus binding to cell surface

heparan sulfate proteoglycans.

A.Jacquet, M.Haumont, D.Chellun, M.Massaer, F.Tufaro, A.Bollen and P.Jacobs, (1998), *Virus Research*, **53**, 197-207.

14)The conformation of purified *Toxoplasma gondii* SAG 1 antigen, secreted from engineered *Pichia pastoris*, is adequate for serorecognition and cell proliferation.

R.Biemans, D.Grégoire, A.Bosseloir, L.Garcia, M.Haumont, **A.Jacquet**, C.Dubeaux and A.Bollen,(1998) *Journal of Biotechnology*, **66**, 137-146.

15)Differential neutralizing antibody responses to varicella-zoster virus glycoprotein B and E following naked DNA immunization.

M.Massaer, M.Haumont, L.Garcia, L.Mazzu, A.Bollen, P.Jacobs and **A.Jacquet**, (1999), *Viral Immunology*, **12**, 227-236.

16)Expression of a recombinant *Toxoplasma gondii* ROP2 fragment as a fusion protein in bacteria circumvents insolubility and proteolytic degradation.

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