Arnaud MORIS, *PhD*

Directeur de Recherche (DR) CNRS

Chef d'Equipe / *Team Leader* **Immunobiologie des infections virales et présentation des antigènes / *Immunobiology of Viral infections and Antigen presentation***

Arnaud Moris, Directeur de Recherche au CNRS, dirige une équipe de recherche du CIMI-Paris. Il a été formé comme ingénieur en biotechnologie à l'Ecole Supérieure de Biotechnologie de Strasbourg (France). Il a travaillé au British Biotech (Royaume-Uni) sur la production de protéines recombinantes et au *Toronto's Hospital for sick Children* (Canada) avant de se inscrire en doctorat à l'Université de Tübingen (Allemagne). Au sein du Département d'Immunologie, dirigé par le professeur Hans-Georg Rammensee, il a utilisé des outils innovants pour étudier la base moléculaire de rejet de greffe. Il a ensuite rejoint l'équipe du Pr Olivier Schwartz à l'Institut Pasteur (France) pour étudier les interactions du VIH-1 et le système immunitaire.

Arnaud Moris est maintenant un chef de file reconnu dans le domaine de l'immunologie et de virologie. Il dirige une équipe s'intéressant aux mécanismes initiaux des réponses immunitaires adaptatives par les cellules dendritiques. Il a développé des outils et l'expertise pour étudier les aspects fondamentaux de la présentation de l'antigène viral. Il contribue, par sa implication dans programmes nationaux et internationaux, à la caractérisation de nouveaux candidats vaccins.

Arnaud Moris, Research Director at CNRS, is heading a research team at the CIMI-Paris. He was trained as an engineer in biotechnology at the Ecole Supérieure de Biotechnology de Strasbourg (France). He worked at British Biotech (UK) on the production of recombinant proteins and at Toronto's Hospital for sick Children (Canada) before enrolling in the PhD program of the University of Tübingen (Germany). In the Dpt. of immunology, directed by Prof. Hans-Georg Rammensee, he used innovative tools to study the molecular basis of graft rejection. He then joined the team of Prof. Olivier Schwartz at the Pasteur Institute (France) to study the interactions of HIV-1 and the immune system.

Arnaud Moris is now a recognized leader in the field of Immunology and Virology. He is heading a team dissecting the initiation of adaptive immune responses by dendritic cells. He developed the tools and expertise to study the basic aspects of viral antigen presentation. He is contributing through national and international programs to the characterization of novel vaccine candidates.

Bio

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Formation / *Education*

2012	HDR	Pierre et Marie Curie University, Paris-6, France.
2000	PhD in Immunology	Tübingen University, Prof. H.G. Rammensee, Germany.

1995	Engineer diploma in Biotechnology	ESBS - École Supérieure de Biotechnologie de Strasbourg / International program including German (Freiburg, Karlsruhe), Swiss (Basel) & French (Strasbourg) universities.
1995	Master	Louis Pasteur University, Strasbourg. Molecular and cellular Biology, Biotechnology speciality.

Expérience professionnelle antérieure / *Past Professional experience*

2014 - …	Head of the team “Immunobiology of Viral infections and Antigen presentation” - CIMI
2011-14	Contrat Hospitalier de Recherche Translationnelle, AP-HP, Hôpital Pitié-Salpêtrière. *Autophagy and Inflammation in HIV infection: a therapeutic target?*
2012	DR2 (CNRS) - INSERM UMR-S945, Université Pierre et Marie Curie, Immunobiology of Antigen Presentation
2009-2012	Principal Investigator (PI), INSERM UMR-S945, Université Pierre et Marie Curie; Immunobiology of Antigen Presentation
2006-2008	Project leader, Pasteur Institute, URA-CNRS-3015, «Virus and Immunity » unit, Dr. O. Schwartz. HIV antigen presentation
2002-2006	Assistant Professor, Pasteur Institute, URA-CNRS-1930, "Virus and Immunity"; Dr. O. Schwartz - Interactions between dendritic cells, HIV and T lymphocytes.
2001-2002	Post-doc, Pasteur Institute, URA-CNRS-1930, "Virus and Gene therapy" - Unit; Dr. J.-M. Heard, HIV-1 infection of dendritic cells, Role of HIV-1 Nef protein
1997-2000	PhD student, University of Tübingen, Immunology Dpt., Germany; Prof. H.G. Rammensee. Molecular basis of ab and gd T cell alloreactivity.
1996	Hospital for Sick Children, Toronto, Canada, Pr. J. Friesen. Splicing in *S. cerevisiae*
1995	British Biotech ltd., Dpt of Biotechnology, Oxford, UK. Production of recombinant proteins in the yeast *Pichia Pastoris*.

Associations professionnelles / *Professionnal societies*

Member of the French club on Dendritic cells (CFCD), French Immunology Society (SFI), ANRS discussion group (AC31) and French club on Autophagy (CFATG).

Recherche / *Research*

Mots-clés / *Keywords :*

VIH, Replication virale, Présentation des antigènes, Immunité, CMH, Autophagie, Centre Germinatif, Cellules T folliculaires, Cellules B

HIV, Viral replication, Antigen presentation, Immunity, MHC, Autophagy, Follicular T cells B cell,

Programme en cours / *Current Research*

Pour lutter contre les infections, une coordination étroite de l'immunité innée et adaptative est cruciale. Les virus, comme le HIV-1, de la rougeole (MeV) et le cytomégalovirus (CMV), ont mis au point des procédés permettant de manipuler les réponses de l'hôte. En particulier, ils affectent les fonctions des cellules dendritiques, qui assurent le lien entre ces deux systèmes de défense.

Notre travail, à l'interface entre l'immunologie et de la virologie, se concentre sur les interactions entre virus et cellules présentatrices d'antigènes, telles que les cellules dendritiques, les macrophages et les cellules B. Nous caractérisons les voies cellulaires impliquées dans la

présentation des antigènes viraux aux cellules T CD4 + et CD8 + et définissons les mécanismes d'échappement potentiels développés par les virus. Notre travail actuel se concentre sur::

- L'étude du rôle de l'autophagie dans la réplication virale (infections à HIV, MeV et CMV) et la présentation de l'antigène.
- les nouvelles expressions d'antigènes viraux à partir de voies d'activation alternative: L'exemple de la protéine ASP (AntiSense Protein) de HIV-1.
- les interactions entre les cellules B et les lymphocytes T"helper" folliculaires (Tfh) dans l'infection VIH-1.
- La caractérisation de nouveaux candidats vaccins.

To fight infections, a tight coordination of innate and adaptive immunity is crucial. Viruses, such as HIV-1, Measles and CMV, have evolved means to manipulate host responses. In particular, they affect the functions of dendritic cells, which coordinates these two arms of immunity.

Our work, at the interface between immunology and virology, focuses on the interactions between viruses and antigen presenting cells, e.g. dendritic cells, macrophages and B cells. We characterize the cellular pathways involved in the presentation of viral antigens to CD4+ and CD8+ T cells and define potential escape mechanism developed by viruses. Our current work focuses on:

- *Studying the role of autophagy in viral replication (including HIV, MeV and CMV) and antigen presentation.*
- *Defining novel sources of viral antigens from alternative reading frames: The example ASP, HIV-1 Antisense protein.*
- *Dissecting the interactions of B cells and T follicular helper (Tfh) cells in HIV-1 infection.*
- *Characterizing novel vaccine candidates.*

Réalisations représentatives / *Major achievements*

- Caractérisation du devenir des virions du VIH-1 dans les cellules dendritiques (CD): digestions dans les lysosomes conduisant à la présentation de l'antigène (Ag) par les molécules du CMH de classe II (*Moris, Blood 2006*), transmission aux cellules CD4+, translocation dans le cytoplasme puis dégradation protéosomale et présentation de l'Ag par les CMH-I (*Moris, Blood 2004*), dissociation entre la capacité des CD à capturer le VIH et à présenter les Ag viraux (*Rodriguez-Plata, J. Immuno 2012*), évasion de la machinerie autophagique pour échapper à la dégradation et à la présentation des Ag, et perturbation de la réponse innée antivirale (*Blanchet, Immunity 2010*).
- Caractérisation d'une nouvelle source d'Ag du VIH issue cadre de lecture alternatifs (ARF). Les CTL anti-ARF exercent une pression de sélection sur le VIH-1 (*Cardinaud, PlosPatho 2011*) et durant l'infection chronique, ciblent la protéine antisens du VIH-1 HIV-1 (ASP) (*Bet, Retrovirology 2015*).
- Définition de nouvelles fonctions pour le facteur antiviral APOBEC-3G (A3G). A3G est un facteur de l'immunité intrinsèque mais aussi un inducteur de la réponse adaptative (CTL) (*Casartelli N, J. Exp. Med. 2010*).
- Caractérisation, in vitro, de candidats vaccins, un prérequis avant les essais cliniques (Brandler, J.Virology 2010).

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- *Definition of the multiple destinies of incoming HIV-1 particles in dendritic cells (DC): degradation in lysosomes leading to MHC-II antigen presentation (Moris, Blood 2006), transmission to CD4+ T cells, translocation to cytoplasm followed by proteosomal processing and MHC-I Ag presentation (Moris, Blood 2004), dissociation between the capacity of DC to capture HIV and to present viral Ag (Rodriguez-Plata, J. Immuno 2012), evasion of the*

autophagic machinery leading to escape from viral degradation, Ag processing and to perturbation of innate signaling (Blanchet, Immunity 2010)

- *Characterization of a novel source of HIV Ag derived from HIV alternative reading frames (ARF). ARF-specific CTLs exert a selective pressure on HIV (Cardinaud, PlosPatho 2011) and during chronic infection, target the antisens protein of HIV-1 (ASP) (Bet, Retrovirology 2015).*
- *Defining a novel function for the antiviral factor APOBEC-3G (A3G). A3G acts not only as an intrinsic antiviral factor, but also as an inducer of the adaptive immune system (Casartelli N, J. Exp. Med. 2010).*
- *In vitro assessment of vaccine candidates, a prerequisite prior clinical development (Brandler, J.Virology 2010).*

Domaines d'applications / *Fields of application*

Infections virales, VIH , réponses immunitaires, Stratégies vaccinales, / *Viral infections, HIV, Immune responses, Vaccines strategy*

Contrats de recherche récents / *External peer-reviewed funding*

2015-2018	ANR	"AutoVirim" : L'Autophagie dans l'immunité virale
2015-2017	ANRS	Defining conserved alternative ORF in HIV-1 genome
2014-2015	ANRS,	Novel aspect of IgG2 antiviral functions
2013-2015	ANRS	La protéine antisens ASP du VIH – Partner
2012-2013	Sidaction	HIV and Autophagy
2011-2014	FP7	Cuthivac Project
2011-2012	ANRS	HIV and Autophagy
2010-2013	UPMC Emergence UPMC	Autophagy & Immunity

Membre de comités d'évaluation scientifiques / *Member of scientific committees*

2011-2015	ANRS CSS1 (comité scientifique sectoriel- 1)
2013	IAS Conference on HIV pathogenesis
2010	Netherlands Organisation for Health Research and (ZonMw)
2007, 2008	Conseil Régional de Rhône-Alpes

Evaluateur / *Reviewer*

2014-2015 Abstract reviewer for the International AIDS Conference,
For : Blood, JI, JV, EJI, J. Leuk. Bio, PlosOne, PlosGenetics, AIDS

Enseignement / *Teaching*

Actuel / *Currents*

2015-2017	Post-Doc	Anne Bet
2013-	PhD	Angéline Rouers

Antérieurs / *Completed*

Post-Docs	2009-2014	Sylvain Cardinaud,
	2008-2009	Shannon Murray
	2006-2009	Samantha Brandler
	2006-2009	Alejandra Urrutia
PhD	2010-2014	Pierre-Grégoire Coulon
Master	P. Louche, L. Colineau, J. Buchrieser and Emmanuel Maze, Pierre-Grégoire Coulon	

Autres activities / *Other teaching activities*

- Immunology lecture, Virology Master 2009-14, Pasteur Institute, France
- Member of PhD Juries : Président : F. Pitoiset, 2014
  Rapporteur : M. Lussignol, N. Benhaij & B. Stefano, 2013
  Examinateur : A. Haydar, A. Dumas, S. Amraoui, 2014; S. Hamimi & M., Valente, 2013; F. Bayard, 2009; M. Guerbois, 2008.

Communication Grand Public / *Outreach activities*

- Interview TF1 21 avril 2011 "Sidaction : Pourquoi le financement privé est si important? / *Interview broadcasted during the National TV channel news (TF1) April, 21, 2011* : http://videos.tf1.fr/jt-we/sidaction-pourquoi-le-financement-prive-est-si-important-6345339.html
- Interview dans/*in* Têtu Magazine
- Chercheur-Participant / *Regular participant to the* "Journée annuelle des donateurs du Sidaction – Visite du laboratoire"

Publications 5 dernières années / *Last 5 years*

2015

- Bet A, Atangana Maze E, Bansal A, Sterrett S, GrossA, Graff-Dubois S, Samri A, Guihot A, Katlama C, Theodorou I, Mesnard JM, Moris A, Goepfert P and Cardinaud S. The HIV-1 Antisense Protein (ASP) induces CD8 T cell responses during chronic infection. Retrovirology 2015

2014

- Moris A, Murray S and Cardinaud S. AID and APOBECs span the gap between innate and adaptive immunity. Frontiers in Microbiology, 2014.
- Soria A, Boccara D, Chonco L, Yahia N, Dufossée M, Cardinaud S, Moris A, Liard C, Joulin-Giet A, Julithe M, Mimoun M, Combadière B, Perrin H. Long-term maintenance of skin immune system in a NOD-Scid IL2rγnull mouse model transplanted with human skin. Exp Dermatol. 2014 Aug 5.

2013

- Antiviral treatments over cell-to-cell infection: is it just a matter of dose? Moris A. AIDS. 2013 Sep 24;27(15):2481-3.
- Immunodominance of HLA-B27-restricted HIV KK10-specific CD8(+) T-cells is not related to naïve precursor frequency. Iglesias MC, Briceno O, Gostick E, Moris A, Meaudre C, Price DA, Ungeheuer MN, Saez-Cirion A, Mallone R, Appay V. Immunol Lett. 2013 Jan;149(1-2):119-22.

2012

- Posch W, Cardinaud S, Hamimi C, Fletcher A, Mühlbacher A, Loacker K, Eichberger P, Dierich M.P, Pancino G, Lass-Flörl C, Moris A, Saez-Cirion A and D Wilflingseder. Antibodies attenuate the capacity of DC to stimulate HIV-specific CTLs. J Allergy Cli Immun. 2012. Dec;130(6):1368-74.
- Rodriguez-Plata MT, Urrutia A, Cardinaud S, Buzón MJ, Izquierdo-Useros N, Prado JG, Puertas MC, Erkizia I, Coulon PG, Cedeño S, Clotet B, Moris A and Martinez-Picado J. HIV-1 Capture and Antigen Presentation by Dendritic Cells: Enhanced Viral Capture Does Not Correlate with Better T Cell Activation. J Immunol. 2012 Jun 15;188(12):6036-45. Selected by the Faculty of 1000 Biology (http://www.f1000biology.com).

2011

- Blanchet F, Moris A, Mitchell JP, Piguet V. A look at HIV journey: from dendritic cells to infection spread in CD4+ T cells. Curr Opin HIV AIDS. 2011 Sep;6(5):391-7.
- Cardinaud S, Consiglieri G, Bouziat R, Urrutia A, Graff-Dubois S, Fourati S, Malet I, Guergnon J, Guihot A, Katlama C, Autran B, van Endert P, Lemonnier FA, Appay V, Schwartz O,

Kloetzel PM and Moris A. CTL escape mediated by proteasomal destruction of an HIV cryptic epitope. PLoS Pathog. 2011 May;7(5):e1002049. Epub 2011 May 12.

- Iglesias MC, Almeida JR, Fastenackels S, van Bockel DJ, Hashimoto M, Venturi V, Gostick E, Urrutia A, Wooldridge L, Clement M, Gras S, Wilmann PG, Autran B, Moris A, Rossjohn J, Davenport MP, Takiguchi M, Brander C, Douek, Kelleher AD, Price DA, Appay V. Escape from highly effective public CD8+ T-cell clonotypes by HIV. Blood. 2011Aug25;118(8):2138-49.
- Tran SL, Guillemet E, Ngo-Camus M, Clybouw C, Puhar A, Moris A, Gohar M, Lereclus D and Ramarao N. Hemolysin II is a Bacillus cereus virulence factor that induces apoptosis of macrophages. Cell Microbiol. 2011 Jan;13(1):92-108.

2010

- Casartelli N, Guivel-Benhassine F, Bouziat R, Brandler S, Schwartz O and Moris A. The antiviral factor APOBEC-3G improves CTL recognition of cultured HIV-infected T cells. J Exp Med. 2010 Jan 18;207(1):39-49, S1-2. Selected as Research Highlights in Nature: Vol 463,14 January 2010. Selected by the Faculty of 1000 Biology (http://www.f1000biology.com).
- Brandler S., Lepelley A., Desdouits M., Ceccaldi P.-E., Lévy Y., Schwartz O and Moris A. Preclinical studies of an MVA-based HIV candidate vaccine: antigen presentation and antiviral effect. J Virol. 2010 May;84(10):5314-28.
- Blanchet F, Moris A, Nikolic DS, Lehmann M, Cardinaud S, Stalder R, Garcia E, Dinkins C, Leuba F, Wu L, Schwartz O, Deretic V and Piguet V. HIV-1 inhibition of immunoamphisomes in DC impairs early innate immune responses. Immunity. 2010 May 28;32(5):654-69. Epub May 6. Selected by the Faculty of 1000 Biology (http://www.f1000biology.com).

2009

- Almeida J.R., Sauce D., Price D.A., Papagno L., Shin S.Y., Moris A., Larsen M., Pancino G., Douek D.C., Autran B., Sáez-Cirión A and Appay V. Antigen sensitivity is a major determinant of CD8+ T-cell polyfunctionality and HIV-suppressive activity. Blood. 2009, 113:6351-6360.
- Guerbois M, Moris A, Combredet C, Najburg V, Ruffié C, Février M, Cayet N, Brandler S, Schwartz O and Tangy F. Live attenuated measles vaccine expressing HIV-1 Gag virus like particles covered with gp160DeltaV1V2 is strongly immunogenic. Virology. 2009. 388:191-203.

Previous

- Hodges A, Sharrocks K, Edelmann M, Baban D, Moris A, Schwartz O, Drakesmith H, Davies K, Kessler B, McMichael A and Simmons A. Activation of the lectin DC-SIGN induces an immature dendritic cell phenotype triggering Rho-GTPase activity required for HIV-1 replication. Nat Immunol. 2007;8:569-577.
- Brandler S, Lucas-Hourani M, Moris A, Frenkiel MP Combredet C, Février M, Bedouelle H, Schwartz O, Desprès P and Tangy F. Pediatric Measles Vaccine Expressing a Dengue Antigen Induces Durable Serotype-specific Neutralizing Antibodies to Dengue Virus. PLoS Negl Trop Dis. 2007;1(3):e96.
- Dasgupta S, Navarrete AM, Bayry J, Delignat S, Wootla B, Andre S, Christophe O, Nascimbeni M, Jacquemin M, Martinez-Pomares L, Geijtenbeek TB, Moris A, Kazatchkine MD, Kaveri SV and Lacroix-Desmazes S. A role for exposed mannosylations in presentation of human therapeutic self-proteins to CD4+ T lymphocytes. Proc Natl Acad Sci U S A. 2007;104:8965-8970.
- Pajot A, Schnuriger A, Moris A, Rodallec A, Ojcius DM, Autran B, Lemonnier FA and Lone YC. The Th1 immune response against HIV-1 Gag p24-derived peptides in mice expressing HLA-A02.01 and HLA-DR1. Eur J Immunol. 2007;37:2635-2644.
- Ceccaldi PE, Delebecque F, Prevost MC, Moris A, Abastado JP, Gessain A, Schwartz O and Ozden S. DC-SIGN facilitates fusion of dendritic cells with human T-cell leukemia virus Type 1-infected cells. J Virol. 2006;80:4771-4780.
- Moris A*, Pajot A, Blanchet F, Guivel F, Salcedo M, Schwartz O. Dendritic cells and HIV-specific CD4+ T cells: HIV antigen presentation, T-cell activation, and viral transfer. Blood. 2006;108:1643-1651. (*cor. author).
- Fackler OT, Moris A, Tibroni N, Giese SI, Glass B, Schwartz O and Kräusslich HG. Functional characterization of HIV-1 Nef mutants in the context of viral infection. Virology. 2006.

- Rybner-Barnier C, Jacquemot C, Cuche C, Dore G, Majlessi L, Gabellec MM, Moris A, Schwartz O, Di Santo J, Cumano A, Leclerc C and Lazarini F. Processing of the bovine spongiform encephalopathy-specific prion protein by dendritic cells. J Virol. 2006;80:4656-4663.
- Nobile C, Petit C, Moris A, Skrabal K, Abastado JP, Mammano F and Schwartz O. Covert human immunodeficiency virus replication in dendritic cells and in DC-SIGN-expressing cells promotes long-term transmission to lymphocytes. J Virol. 2005;79:5386-5399.
- Moris A, Nobile C, Buseyne F, Porrot F, Abastado JP and Schwartz O. DC-SIGN promotes exogenous MHC-I-restricted HIV-1 antigen presentation. Blood. 2004;103:2648-2654. Selected as Highlight in Nature Rev. Im: Vol 3, Dec 2003.
- Cardinaud S, Moris A, Fevrier M, Rohrlich PS, Weiss L, Langlade-Demoyen P, Lemonnier FA, Schwartz O and Habel A. Identification of cryptic MHC I-restricted epitopes encoded by HIV-1 alternative reading frames. J Exp Med. 2004;199:1053-1063.
- Nobile C, Moris A, Porrot F, Sol-Foulon N and Schwartz O. Inhibition of human immunodeficiency virus type 1 Env-mediated fusion by DC-SIGN. J Virol. 2003;77:5313-5323.
- Lang KS, Moris A, Gouttefangeas C, Walter S, Teichgräber V, Miller M, Wernet D, Hamprecht K, Rammensee HG and Stevanovic S. High frequency of human cytomegalovirus (HCMV)-specific CD8+ T cells detected in a healthy CMV-seropositive donor. Cell Mol Life Sci. 2002;59:1076-1080.
- Sol-Foulon N, Moris A, Nobile C, Boccaccio C, Engering A, Abastado JP, Heard JM, van Kooyk Y and Schwartz O. HIV-1 Nef-induced upregulation of DC-SIGN in dendritic cells promotes lymphocyte clustering and viral spread. Immunity. 2002;16:145-155.
- Einsele H, Roosnek E, Rufer N, Sinzger C, Riegler S, Loffler J, Grigoleit U, Moris A, Rammensee HG, Kanz L, Kleihauer A, Frank F, Jahn G and Hebart H. Infusion of cytomegalovirus (CMV)-specific T cells for the treatment of CMV infection not responding to antiviral chemotherapy. Blood. 2002;99:3916-3922.
- Moris A, Teichgraber V, Gauthier L, Buhring HJ, Rammensee HG. Cutting edge: characterization of allorestricted and peptide-selective alloreactive T cells using HLA-tetramer selection. J Immunol. Cutting Edge, 2001;166:4818-4821.
- Kleihauer A, Grigoleit U, Hebart H, Moris A, et al. Ex vivo generation of human cytomegalovirus-specific cytotoxic T cells by peptide-pulsed dendritic cells. Br J Haematol. 2001;113:231-239.
- Lang KS, Caroli CC, Muhm A, Wernet D, Moris A, Schittek B, Knauss-Scherwitz E, Stevanovic S, Rammensee HG and Garbe C. HLA-A2 restricted, melanocyte-specific CD8(+) T lymphocytes detected in vitiligo patients are related to disease activity and are predominantly directed against MelanA/MART1. J Invest Dermatol. 2001;116:891-897.
- Pascolo S, Schirle M, Guckel B, Dumrese T, Stumm S, Kayser S, Moris A, Wallwiener D, Rammensee HG and Stevanovic S. A MAGE-A1 HLA-A A*0201 epitope identified by mass spectrometry. Cancer Res. 2001;61:4072-4077.
- Moris A, Wernet D, Stevanovic S, Rammensee HG. The peptide-specific alloreactive human T cell repertoire varies largely between individuals and is not extended in HLA-A*0205--anti-HLA-A*0201 pairings. Int Immunol. 2001;13:863-870.
- Fisch P, Moris A, Rammensee HG, Handgretinger R. Inhibitory MHC class I receptors on gammadelta T cells in tumour immunity and autoimmunity. Immunol Today. 2000;21:187-191.
- Handgretinger R, Geiselhart A, Moris A, Grau R, Teuffel O, Bethge W, Kanz L and Fisch P. Pure red-cell aplasia associated with clonal expansion of granular lymphocytes expressing killer-cell inhibitory receptors. N Engl J Med. 1999;340:278-284.
- Moris A, Rothenfusser S, Meuer E, Hangretinger R, Fisch P. Role of gammadelta T cells in tumor immunity and their control by NK receptors. Microbes Infect. 1999;1:227-234.
- Xu D, Field DJ, Tang SJ, Moris A, Bobechko BP, Friesen JD. Synthetic lethality of yeast slt mutations with U2 small nuclear RNA mutations suggests functional interactions between U2 and U5 snRNPs that are important for both steps of pre-mRNA splicing. Mol Cell Biol. 1998;18:2055-2066.

Reviews and book Chapters

- Maria Candela Iglesias, Victor Appay and Arnaud Moris. Immunological memory: T cells in humans. Vaccinology, Wiley-Blackwell (2012)