



Oumaïma Ibrahim-Granet

Institut Pasteur,
Cytokines & Inflammation
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Assistant Professor INSTITUT PASTEUR

Graduate and post-graduate training

1987

Doctorat ès Sciences (PhD) Biologie Fongique

University PMC Paris VI

1979

Doctorat de troisième cycle in Entomology

University of Toulouse

1973

Master of Science

Faculty of Science Lebanese University (Beirut Lebanon)

Additional graduate courses and training

2007

Certificate for Animal Experimentation Level 1

1997

Training at the University of San Sebastian (Spain)
Extraction and purification of membrane proteins from *Aspergillus fumigatus*

1990-1991

Post doctoral training in Biochemistry (Unité Inserm 160, Hopital Beaujon Paris)
Protease purification from *Aspergillus fumigatus*

Professional activities

2007- present

Assistant Professor, Research Scientist, Unité de Recherche Cytokines & Inflammation

2006- present

Project Manager Programmes Transversaux de Recherche

1990-2006

Research Scientist, Unité des *Aspergillus*

1987-1990

Research Scientist, Unité de Mycologie

1986-1987

Institut Pasteur-Institut Weizman fellow

1984-1985

Fondation de la Recherche médicale fellow

Teaching activities

2005-2013

Masters 1 and 2 in Sciences and Technology Paris VI, Master in parasitology, mycology and immunology

2004-2010

Lecturer at the Bernese Modular Course in Medical Mycology, Bern Switzerland

2002-2004

Assistant Director Medical Mycology Institut Pasteur

2001-2002

Head of Studies, Medical Mycology Institut Pasteur

2011-2013

Lecturer, Master of Medical Microbiology Lebanese University, Lebanon

2011

Lecturer, School of medicine (MEDII), Balamand University, Lebanon

Supervision and PhD tutorship

P. Laskaris Post Doc

2012-2013

A. Savers, Engineer, C. Moniot PhD committee,

2012

J. Robic Engineer first year student training

2011

A. Boisrame-Baudevin, Referee for Habilitation à Diriger des Recherches

2010-2011

C. Koumba, A. Savers Master students Paris 11 and Paris 6

2009

S. Slesiona, Veterinarian, PhD student Germany, G. Pineau ITA

2007

N. Dufour Master student

2006

M. Brock Post Doc, M. Moreno Hidalgo PhD student, M. Schrettl Post Doc

2003-2005

M. Dubourdeau Post Doc, F. Botterel PhD referee

2000-2004

B. Philippe PhD Co-supervision

1999

B. Philippe Master student

1993

F. Hernandez Master student

Invited Speaker

2012

French Mycology Society (Paris), 9th Arab conference for Antimicrobial Agents (Beirut, Lebanon)

2010

Third Advances Against *Aspergillus* meeting (Rome, Italy)

2009

Innate Immunity and Infection meeting Institut Pasteur

2008

The annual meeting of the Hellenic Society of Medical Mycology (Thessaloniki, Greece)

2007

Trends In Medical Mycology meeting (Torino, Italy)

2006	2nd Advances Against Aspergillosis (Athens, Greece)
2004	European Confederation of Medical Mycology meeting <i>Aspergillus fumigatus</i> and the alveolar macrophage (Wroclaw Poland)
2003	European Confederation: Human Fungal Pathogens <i>Aspergillus fumigatus</i> and the alveolar macrophage (Giens France)

Summary of research interest

Host-fungal interactions, innate immunity, virulence and pathophysiology
 Animal models for aspergillosis, cellular mechanisms involved in fungal recognition, phagocytosis and killing, bioluminescence, histopathology, genomics, antifungals
 Animal experimentation: Murine invasive aspergillosis model:
 intranasal, intraperitoneal and intravenous infections, mice sections
 Bronchoalveolar lavages, Flow cytometry, ELISA, Multiplex
 Real Time imaging

Selected publications

Ibrahim-Granet O., Philippe B, Boleti H, Boisvieux-Ullrich E, Grenet D, Stern M, Latgé JP (2003) Phagocytosis and intracellular fate of *Aspergillus fumigatus* conidia in alveolar macrophages. Infect. Immun. 71:891-903

B. Philippe, **Ibrahim-Granet O.**, Prevost MC, Gougerot-Pocidalo MA, Sanchez Perez M, Van Der Meeren A, Latgé JP (2003) Killing of *Aspergillus fumigatus* by the alveolar macrophage is mediated by reactive oxidant intermediates. Infect. Immun. 71:3034-3042.

Dubourdeau M, Athman R, Balloy V, Huerre M, Chignard M, Philpott DJ, Latgé JP, **Ibrahim-Granet O** (2006) *Aspergillus fumigatus* Induces Innate Immune Responses in Alveolar Macrophages through the MAPK Pathway Independently of TLR2 and TLR4. *J Immunol* 2006 177: 3994-4001.

Moreno MA., **Ibrahim-Granet O.**, Vicentefranqueira R., Amich J., Ave P., Leal F., Latgé JP, Calera JA. The regulation of Zinc homeostasis by the ZafA transcriptional activator is essential for *Aspergillus fumigatus* virulence Molecular Microbiology, 2007 Jun; 64(5):1182-97

Ibrahim-Granet O., Dubourdeau M., Latgé JP., Ave P., Huerre M., Brakhage AA., Brock M. Amino acid degradation by the methylcitrate cycle is essential for *Aspergillus fumigatus* pathogenesis. Cellular Microbiology, 2008 10 (1): 134-148

Brock M., Jouvion G., Droin S., Dussurget O., Nicola M-A, **Ibrahim-Granet O.**, Bioluminescent *Aspergillus fumigatus*: A new tool for drug efficiency testing and in vivo monitoring of invasive aspergillosis. Appl Environ Microbiol. 2008 Nov;74(22):7023-35. Epub 2008 Sep 26.

Ibrahim-Granet O, Jouvion G, Hohl TM, Droin-Bergère S, Philippart F, Kim OY, Adib-Conquy M, Schwendener R, Cavaillon JM, Brock M. In vivo bioluminescence imaging and histopathologic analysis reveal distinct roles for resident and recruited immune effector cells in defense against invasive aspergillosis. BMC Microbiol. 2010 Apr 8;10:105.

Schrettl M, **Ibrahim-Granet O**, Droin S, Huerre M, Latgé JP, Haas H. The crucial role of the *Aspergillus fumigatus* siderophore system in interaction with alveolar macrophages. Microbes Infect. 2010 Nov;12(12-13):1035-41. Epub 2010 Jul 24.

Jouvion G, Brock M, Droin-Bergere S, **Ibrahim-Granet O.** Duality of liver and kidney lesions after systemic infection of immunosuppressed and immunocompetent mice with *Aspergillus fumigatus*. Virulence. 2012 Jan 1;3(1).

Fekkar A, Pionneau C, Brossas JY, Marinach-Patrice C, Snounou G, Brock M, **Ibrahim-Granet O**, Mazier D. DIGE enables the detection of a putative serum biomarker of fungal origin in a mouse model of invasive aspergillosis. J Proteomics. 2012 Feb 17.

Slesiona S, **Ibrahim-Granet O**, Olias P, Brock M, Jacobsen ID. Murine infection models for *Aspergillus terreus* pulmonary aspergillosis reveal long-term persistence of conidia and liver degeneration. J Infect Dis. 2012 Apr;205(8):1268-77.

Célimène Galiger, Matthias Brock, Grégory Jouvion, Amélie Savers, Marianna Parlato and **Oumäïma Ibrahim-Granet**. Assessment of efficacy antifungals against *Aspergillus fumigatus*: the value of real-time bioluminescence imaging. Antimicrobial Agents and Chemotherapy 2013 Jul;57(7):3046-59

