

Topic 2 : Biology, Biotechnology & Health Sciences



Dr Yassine AMRANI

Leicester Respiratory Biomedical Research Unit, Glenfield Hospital, Leicester, UK

Dr Yassine Amrani is an internationally-recognized medical researcher in the field of asthma pathogenesis with expertise in basic and experimental clinical medicine. He obtained his PhD in Respiratory Medicine with the highest honor "summa cum laude" from the University of Strasbourg, France. He is a member of the Institute for Lung Health and Principal Investigator at Leicester Respiratory Biomedical Research Unit at Glenfield Hospital.

Using translational "bench-to-bedside" approaches, Dr Amrani made key discoveries regarding the pathogenesis of severe asthma, a disease poorly controlled by current therapies. Throughout his career, Dr Amrani received over \$6 million worth of research and programme grants (as PI, co-PI and collaborator) from National Institute of Health (US), American Lung Association (US), Parker B. Francis Foundation (US) and Wellcome trust (UK). He received grant awards from various medical foundations: Parker B. Francis Fellowship Award (USA), Association Française pour la Recherche Thérapeutique, Fondation pour la Recherche Médicale (Paris, France), Association Claude Bernard and Fondation pour la Recherche Médicale (Paris, France). He has published over 100 peer-reviewed articles/reviews in top medical journals and wrote 10 book chapters in pulmonary medicine. His H-index is 38 (scopus). He has delivered over 50 lectures in different Universities and international meetings including American Thoracic Society and American Academy of Allergy Asthma and Immunology. He has served as a chair/member of committee panels for funding bodies (UK, Ireland, USA, France) and is an ad hoc reviewer for > 41 top journals (including Nature Com, Proc Natl Acad Sci USA, J Clin Invest, J Allergy Clin Immunol among others).



Dr Jamil ASSELAH

McGill University Health Centre, Montréal, CAN

Trained in Algiers and Paris as a medical oncologist, Dr. Asselah completed a 2-year fellowship on phase 1 clinical trials at the Investigation Unit of the Curie Institute Cancer Centre in Paris, France. In 2008, he joined the Université de Sherbrooke as an Assistant Professor, developing new research protocols in breast cancer and standardizing treatment practices at the Centre Hospitalier Universitaire de Sherbrooke, where he also launched the oncology residency program.

He joined McGill in 2011 as an Assistant Professor in the Department of Oncology and is now Associate Professor and director of Oncology Undergraduate Medical Education. He is on staff as a medical oncologist at the McGill University Health Centre, where he spearheaded a working group standardizing treatment guidelines for breast cancer. He was the first Site Lead for the Rossy Cancer Network.

Dr. Asselah has been the principal investigator in numerous clinical research protocols, and has been part of several research groups at the Provincial and National level. His research interests include Breast Cancers, Gastrointestinal Cancers, and Cancers of the Head and Neck.



Dr Hacene BOUKARI

Delaware State University, Dover – Delaware, USA

Hacene Boukari, PhD, is Professor of physics at Delaware State University, Dover, Delaware, USA. He obtained his Diplome des Etudes Supérieures from the Université d'Annaba, Algeria and his PhD degree in Chemical Physics from the University of Maryland, College Park, Maryland, USA. His research career started while working on a 22-million-dollar NASA-funded project (Zeno Experiment) to design, build, and operate a high-resolution spectrometer for studying the behavior of superfluid xenon in microgravity aboard the NASA space-shuttle. The goals of this project were accomplished in two NASA space missions in 1994 (Discovery) and 1996 (Columbia).

Before joining Delaware State University, he held the position of Director of Imaging at Albert Einstein College of Medicine in New York (2009-2010), was a Senior Scientist at the National Institutes of Health in Bethesda, Maryland (2000-2009), was a Senior Researcher at the National Institute of Standards and Technology (1997-1999) in Gaithersburg, Maryland, and was a Postdoctoral Fellow (1992-1997) at the University of Maryland, College Park, Maryland. He worked on diverse projects, including understanding the transport properties of supercritical fluids (NASA), elucidating the nucleation and growth of silica nanoparticles (UMd), characterizing the mesoscopic structure of ceramic materials and polymeric gels (NIST), determining interactions of biopolymers and cells (NIH),

and probing diffusion of nanoparticles in complex biological media (NIH,NSF,NNSA).

Currently, his work focuses on bridging advanced novel optical and imaging techniques and integrative nanomedicine to elucidate and quantify interactions and mechanisms of transport of biomacromolecules in cellular systems, paving the way for designing diagnostic biomarkers, understanding assembly processes in biological systems, and understanding pathways for drug delivery.

Dr. Boukari received the researcher award from NASA for his work on the Zeno project and the DSU research and service Awards. He is currently the DSU-PI of the NIH-funded Delaware INBRE program, the DSU-PI of the NNSA-funded ROSES program, and co-PI of the NASA-funded O*STAR Center. He has published more than 45 peer-reviewed papers and book-chapters in diverse fields such as critical phenomena, optical physics, biophysics, polymer science, and biomedical optics. He was an invited speaker to many professional conferences and academic/research institutions, in particular the Materials Research Society. He is a member of several professional societies: SPIE, the American Physical Society, the Biophysical Society, and the American Association of Physicists in Medicine; a member of the Editorial Board of Nanoscience; and a frequent reviewer of many journals. His collaborative research and educational activities have been funded by DoD, NSF, NIH, DoE, and NASA.



Dr Hind BOUK'HIL

Spin Safety®, Rennes, FR

Dr Hind Bouk'hil was born and raised in Algeria. She received her BS of Physics and her BS in E.E.A. (Electronics Electrotechnics Automatics) from University of Rennes 1 (Rennes, France). She went on to receive a M.Sc. in « Signals and Images in Biology and Medicine » (DEA « SIBM », Diplôme d'Etudes Approfondies) during which she specialized in Nuclear Physics applied to Medical Imaging.

During her PhD in « Biological and Medical Engineering », her work focused on the assessment of the contribution of the wave-matter in the characterization of the heating effects of metallic biomaterials in Magnetic Resonance Imaging (MRI). Her work was published in renowned international journals.

After her PhD, Dr Bouk'hil created the company Spin Safety®, an innovative high technology company.

Spin Safety® has been very successful for the past 15 years and has been providing expertise in Quality Assessment and Safety in MRI and expertise in Radiation Protection in Odontology. As such, Dr Bouk'hil has been the winner of various Innovation Awards.

For more than 20 years, Dr Bouk'hil has been lecturer in Universities (eg: Sciences, Medical, Odontology) and Institutes in the fields of MRI, XR-Imaging and Radiation Protection.

Since 2006, Dr Bouk'hil has been certified « Personne Compétente en Radioprotection (PCR) » for France (eg. RPA& RWA in UK). She has become a reference who offers her expertise to multiple entities (eg: Autorité de Sûreté Nucléaire (French Nuclear Safety Agency)), participates in research activities (CHRU de Tours...) and is a member of professional organizations in her field (eg : Réseau PCR Grand Ouest (France)).



Dr Derradji BOUMRAH

GlaxoSmithKline, Ware, UK

Boumrah Derradji is currently working at GlaxoSmithKline as a Regulatory Affairs CMC specialist.

Derradji graduated in June 1985 from University of Constantine with a D.E.S in Chemistry. He went on to receive his PhD degree in January 1986 from Strathclyde University, Scotland. In 1991 he received his PhD from the Department of Pure & Applied Chemistry, Strathclyde University, UK.

In January 1990, he started working at the University of Bath, UK, as a Post-doctoral Research Associate, while he was writing up his PhD thesis.

In October 1998, he joined Key Organics Ltd, as Research Chemist. He was involved in the synthesis of Biological active compounds to be tested as Agonist, antagonist and inhibitors.

In May 2000, he joined Evotec OAI, Oxford, UK, as a senior Chemist, where he worked on process chemistry. In October 2001, he joined Biofocus plc, UK, as senior Scientist.

In February 2004 has joined Pfizer, UK. His role involves the development of processes in the lab and transferring them to supply chain (pilot plant) and PGM. Also, has joined the Veterinary Medicine Regulatory Department to acquire skills in Regulatory affairs.

Derradji has experience in Organic/Medicinal Chemistry and process development Chemistry. He is a Regulatory Affairs Professional with experience in the generic and pharmaceutical drugs sectors.



Pr Mehdi BOUROUBA

USTHB, Algiers, DZ

Pr. Bourouba Mehdi is specialized in tumor biology. After graduating in Biological Engineering in 1993 from USTHB and obtaining his DIU in Immunology from Paris 7 University in 2000, he obtained his PhD in 2005 from the TK Karlsruhe University in collaboration with the German Research Center on Cancer (DKFZ). After his post-doctoral trainings in France (CNRS, INSERM), he pursued a specialization at Harvard Medical School (2016) on Cancer biology and advanced antitumor therapies. He joined USTHB in 2009. Pr. Bourouba has since supervised several doctorates and master's projects on the biology of the cancers of the upper aerodigestive tract.

His field of study includes the identification of predictive biomarkers of metastasis and resistance to therapies, as well as the development of interference approaches to tumor development and recurrence.



Dr Ahmed CHENNA

Oncology Group, Monogram Biosciences, Inc., Integrated Oncology-LabCorp, Inc., San Francisco, USA

Dr. Ahmed Chenna is a principal scientist in the oncology group at Monogram Biosciences Inc., part of Laboratory Corporation of America and managed the oncology reagent group. He played a key role in the development and validation of VeraTag™ technology for cancer biomarker products such as Her1, Her2, Her2-Her2 homodimer, P95, Her3, Her3-PI3K, Her2-Her3 heterodimer, and c-met. VeraTag™ technology can accelerate the development of targeted therapeutics, improve clinical trial design and results, clarify and individualize the selection of medications, and optimize outcomes for patients with cancer and other serious diseases. In 1999 to 2004, he worked at ACLARA Biosciences as a senior scientist and lab supervisor in the Advanced Technologies Group, where he was the co-inventor of VeraTag™ technology for gene expression multiplexing up to 50 genes.

In the 1990's, he worked as Staff Scientist in the University of Berkeley-Lawrence Berkeley National Laboratory, Life Science Division, and as a postdoctoral research associate, in *Department of Pharmacological Sciences, School of Medicine*, State University of New York at Stony Brook on DNA damage, repair, and replication. People are exposed daily to environmental chemicals classified as mutagens and/or carcinogens such as vinyl chloride; mucochloric acid from chlorination of drinking water; the widely administered therapeutic halonitrosoureas, e.g. BCNU and benzene metabolites, p-benzoquinone and others which damage DNA. The aim of the work was to identify and understand the mechanism by which such DNA damage may lead to the biological endpoints, such as mutation and ultimately, cancer. Dr. Chenna was a co-principal investigator of two-awarded NIH sponsored research grants for \$3.2 million.

From 1986 to 1990, he was a Ph.D. Student, Strathclyde University, Glasgow, Scotland, (UK), where he designed and synthesized a series of a novel compounds tested for their potential biological activity in Central Nervous System (CNS) and anti-cancer by Organon Laboratories Ltd., UK. Dr. Chenna graduated in 1985 from University of Constantine, Algeria, B.Sc. in chemistry. Dr. Chenna has over 25 years of experience in research, development, supervision of scientists, research associates and graduate students in academia and biotechnology companies.

In 2010, he chaired the scientific committee of the Biotech World Conference, Oran, Algeria and currently serving as a member of the Scientific Board of the Biotechnology Center of Constantine, Algeria and a consultant for Life Science Division, Lawrence Berkeley National Laboratory. He is a member of the American Chemical Society (ACS) and the American Association for Cancer Research (AACR), served in the board of the Algerian American Association of Northern California (AAA-NC) and a member and one of the founders of the Algerian Competences Association (ACA). Dr. Chenna authored over 70 technical publications & conference abstracts including 13 US patents.



Pr Taha MERGHOUB

Melanoma and Immunotherapeutics Service, Memorial Sloan Kettering Cancer Center, New York, USA

Taha Merghoub, PhD was born and raised in Algeria. He received his B.A. degree from the University of Algiers, Algeria, DES (Diplôme D'Etudes Supérieures) in Genetics. He went on to receive a M.S. (Applied Biology and Genetics) and Ph.D. degree (Human Genetics). He is currently faculty (Attending Lab Member) in the Melanoma and Immunotherapeutics Service, Department of Medicine, Memorial Sloan Kettering Cancer Center (MSKCC), New York, USA. He is the co-director of the Ludwig collaborative laboratory at MSK. He is also the lead for the tissue repository of the Melanoma disease management team at MSKCC and he is a Member Researcher of the Parker Institute for Cancer Immunotherapy at MSK.

His research focuses on the interplay between tumors and the immune system in early stages of cancer formation, and the development of novel immunotherapeutic treatment strategies with particular focus on melanoma as a

model system. The FDA has approved multiple immune therapies recently (anti-CTLA-4, anti-PD1/PDL-1 and T-VEC) and he is now aiming to combine these treatments with conventional therapies that are known to modulate the immune system such as radiation therapy. He also has interest in studying the genetic determinants of response to immune therapies. His career is focused on developing immunotherapies for the treatment of cancer. He has been working on pre-clinical model and validating the relevance of the findings in clinical samples of patients treated with immunotherapies. His research is conducted within the Ludwig Collaborative and Swim Across America lab and in partnership with members of the Melanoma DMT and other MSK investigators with shared research interests. Dr. Merghoub has published over 100 peer-reviewed papers and book-chapters. His research has also received funding from several federal agencies and philanthropic organizations.

Taha Merghoub is involved in multiple organizations and some of them aim at helping Algerians both here in USA and in Algeria. He served in multiple associations (including AAF, AASA, ACA and the Harlem Children Society) that aim to help Algerian students, scientists and health professional.



Dr Zoubir OUHIB

Lynn Cancer Institute – Florida Atlantic University, Boca Raton, USA

Zoubir Ouhib is currently the chief Medical Physicist at the Lynn Cancer Institute of Boca Raton Regional Hospital located in Boca Raton, Florida (USA). He is an Assistant Professor at the Florida Atlantic University at the department of Medical Physics.

He received a Master Degree in Nuclear Engineering in 1978 from Georgia Institute of Technology and a Master Degree in Medical Physics from University of Cincinnati in 1982. He is board certified by the American Board of Radiology in radiation therapy and is a Fellow of both the American College of Radiology (ACR) (2015) and the American Brachytherapy Society (ABS) (2018).

In 1982, he started as a staff physicist at the Wellman Cancer center in Lakeland, Florida. In 1986, he became the chief of Medical Physics at the Tampa General Hospital in Tampa, Florida. He joined Dartmouth Hitchcock Medical Center in 1992 and in 1994 he became the director of the medical physics department at the Elliot Hospital in Manchester, New Hampshire. In 1998, he joined the Boca Raton Regional Hospital (Boca Raton, FL) where he is currently the Chief Medical Physicist.

Member of several committees: Apex (ASTRO), ACMUI (NRC), ACRRO (ABS liaison), ABS (Board of directors), ABS (Patient safety, co-chair), ABS (International committee, Vice-chair), AAPM (Chair of BTSC), AAPM Task Groups (TG-121, HEBD, TG-167, TG-244, TG-236, TG182, WG on Brachytherapy, TG-253, TG-288, TG-292)

He has served as a reviewer for several medical physics and radiation oncology journals. He served for several years as chair of the American Brachytherapy School entitled "Quality Management in Brachytherapy". He published several international peer-reviewed articles and has served as a speaker at several national and international meeting (AAPM, ASTRO, ESTRO, ABS). He was the author of multiple chapters in several books and articles related to breast, prostate, skin, and radiobiology. He served as president of the Florida AAPM Chapter (2002). While Brachytherapy has been his focus, patient safety and quality assurance in radiation therapy were his primary areas of interest.



Pr Chafia TOUIL-BOUKOFFA

LBCM – Team « Cytokines and NO Synthases », USTHB, Algiers, DZ

Pr Chafia Touil-Boukoffa obtained her Doctorate Degree in Biochemistry-Immunology in 1998 at the university of sciences and technology (USTHB), Algiers, Algeria. Since this period, she has developed many projects in the field of immunology and biotechnology in collaboration with Curie Institute-Interferon and cytokine research-365 Unit-Paris -France). Since 2000, she is a head of "Cytokines and NO Synthases" Team-laboratory (www.lbcm.usthb.dz). Her research projects are about the study of cytokines and NO Synthases involvement in the mechanisms of pathogenesis and immune responses in parasite disease and in auto-immune and inflammatory disease which are frequent in Algeria (Uveitis, Behçet disease, inflammatory bowel disease, systemic inflammatory vasculitis.). She is an author of many publications in the immunology and biomedicine field and she has received international and national awards for her works. Since June 2015, she has been nominated as a member of Algerian Academy of Sciences and Technology



Dr Ahmed A. ZERGOUN

Université M'hamed Bougara, Boumerdès, DZ

Ahmed Amine Zergoun is an assistant professor at the university M'hamed Bougara, Boumerdes, Algeria. He conducts his research at the university of Sciences and technology Houari Boumediene "USTHB" as member of Cytokines and NO Synthase's team headed by the Pr. Touil-Boukoffa C.

During his PhD (mentored by Pr. Bourouba), he focused on the inflammatory processes that modulate NOS2 activity; an enzyme implicated in the pathophysiology of nasopharyngeal carcinoma. In addition, he studied the immunosuppressive mechanisms employed by tumor cells within the tumor microenvironment; via an established crosstalk among soluble mediators such as cytokines, chemokines, enzymes, stromal and immune cells.

At the present time, his work is aimed at understanding the mechanisms underlying host-tumor interactions and the implication of viral infection (EBV, HPV) in the pathogenesis of breast cancer.