

CURRICULUM VITAE

Name: Saloua

Last name: Sahbani

Profession: Assistant Professor

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Address: Quebec, Canada

Ph.D. in radiation science and biomedical imaging and biochemistry and molecular biology with more than 10 years of scientific research experience (I am a Radiobiologist). I have the ability to plan, organize, set priorities, solve problems and meet expectations in terms of work, I have, also the ability to handle problematic and difficult cases.

I am perfectly honest with myself and with others. Warm, friendly, easy-going, and cooperative with others. I love teamwork. I have the ability to set priorities, to separate relevant tasks from those that are not relevant. I take risks, I accept challenges, and I can carry out complex tasks or even new jobs where there is a high degree of uncertainty and the possibility of failure.

2015-2022: Assistant Professor, *Taibah University, KSA.*

2017-2022: Assistant of the quality and development agent at the Faculty of Applied Medical Sciences.

2022-2023: Chair of the Data committee.

2022-2023: Member of the Exam Committee.

2022-2023: Member of the Student Activities.

2014-2015: Postdoc Fellow, University of Alberta, Edmonton, Canada.

Major: Nuclear Medicine.

Specialization: Radiotherapy treatment.

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EDUCATION

Ph.D. in Radiation Science and Biomedical Imaging, Faculty of Medicine and Health Sciences of Sherbrooke, University of Sherbrooke.

Advisors: Darel D.J. Hunting and Léon Sanche

'Effet des radiations gamma et des electrons de basse energie sur la fonctionnalite de l'ADN.' (2011-2014)

PUBLICATIONS

Kouass Sahbani Saloua. Protective effect of *Opuntia ficus indica* cladode extract against gamma radiation-induced DNA strand breaks and base damage. *Journal of Radiation Research and Applied Sciences*, 2023.

Ahmed Selmi; Saloua Kouass Sahbani; Khemais Said; Samah Akriche; Ridha Ben Salem; salah kouass. Sol-gel Synthesis of LiSICON compound and their studies by X-ray powder diffraction, infrared, magnetic and impedance spectroscopy. *Journal of Molecular Structure*, 2023.

Kouass Sahbani Saloua. Epigallocatechin-3-gallate enhances sterilization of irradiated whole bovine casein and protects alpha and beta caseins from gamma radiation: depending on polyphenol/protein ratio. *Journal of Radiation Research and Applied Sciences*. 2023.

Yousef Rasmi, Kouass Sahbani Saloua, Mahdieh Nemati, and Jane Ru Choi. Recent Progress in Nanotechnology for COVID-19 Prevention, Diagnostics and Treatment. *Nanomaterials*. 2021, 11.

Salah Kouass, S. Kouass Sahbani, Hassouna Dhaouadi and Fathi Touati. Chromium substitution induced effects on the structure optical and electrical properties of yttrium oxide. *Journal of the Australian Ceramic Society*. 2017, 53:403–413.

S. Kouass Sahbani, P. Cloutier, A.D. Bass, D.J Hunting and L. Sanche. Electron Resonance Decay into a Biological Function: Decrease in Viability of *E. coli* Transformed by Plasmid DNA Irradiated with 0.5– 18 eV Electrons. *The Journal of Physical Chemistry Letters*. 2015, 6, 3911–3914.

S. Kouass Sahbani, L. Sanche, P. Cloutier, A.D. Bass, and D.J Hunting. Loss of Cellular Transformation Efficiency Induced By DNA Irradiation with Low-energy (10 eV) Electrons. *The Journal of Physical Chemistry B*, 118(46):13123-31.

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S. Kouass Sahbani Saloua, M. Rezaee, P. Cloutier, L. Sanche L and J. D. Hunting. Non-DSB clustered DNA lesions induced by ionizing radiation are largely responsible for the loss of plasmid DNA functionality in the presence of cisplatin. *Chemico-Biological Interactions*, 217: 9-18.

Kouass Sahbani Saloua, Girouard Sonia, Cloutier Pierre, Sanche Léon and Hunting J. Darel. The relative contributions of DNA strand breaks, base damage and clustered lesions to the loss of DNA functionality induced by ionizing radiation. *Radiation Research*, 181(1):99-110.

Kouass Sahbani Saloua, Klarskov Klaus, Kouass Salah, Aloui Amine and Landoulsi Ahmed. Protective role of ascorbic acid in the decontamination of cow milk casein by gamma-irradiation. *International Journal of Radiation Biology*, 89(6):411-5.

Kouass Sahbani Saloua, Aloui Amine, Kouass Salah, Zourgui Lazhar and Landoulsi Ahmed. Optimizing of sterilization of casein for novel use. In: *Casein: Production, Uses and Health Effects*. Protein Science and Engineering Nutrition and Diet Research Progress. Nova Science Publishers, Inc. p. 275.

Kouass Sahbani Saloua, Kouass Salah, and Landoulsi Ahmed. Tea polyphenols: health, bioavailability and novel use. In: *Tea consumption and health. Food and Beverage Consumption and Health*. Nova Science Publishers, Inc.

Kouass Sahbani Saloua, Kouass Salah, Aloui Amine and Landoulsi Ahmed. Polyphenol tea: protein protection, cancer prevent and nanotechnology. Green tea: varieties, production and health benefits. *Food and Beverage Consumption and Health*. Nova Science Publishers, Inc.

Kouass Sahbani Saloua, Kouass Salah, Benbettaieb Nasreddine, Ayari Samia, Saidi Mouldi, and Landoulsi Ahmed. Sterilization and protection of protein in combinations of *Camellia sinensis* green tea extract and gamma irradiation. *International Journal of Biological Macromolecules*, 48, 452–458.

Aloui Amine, Mihoub Mouadh, Kouass Sahbani Saloua, EL May Alya and Landoulsi Ahmed. Effects of ox bile extract on the phospholipids and fatty acids membrane composition of *Salmonella enterica* serovar Typhimurium seqA Mutant Strain. *Current Chemical Biology*, 5(3), 2011, 8, 189-196.

Amine Aloui, Kouass Sahbani Saloua, Mihoub Mouadh, El May Alya and Ahmed Landoulsi. The Absence of the “GATC - Binding Protein SeqA” Affects DNA replication in *Salmonella enterica* serovar Typhimurium. In: *DNA Replication and Related Cellular Processes*. InTech.

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MEETING PARTICIPATION

Oral Communication

S. Kouass Sahbani. Effect of gamma radiation, chemotherapeutic drugs and low energy electrons on DNA functionality. International congress on scientific research-VI. ANKARA, 2022.

S. Kouass Sahbani, P. Cloutier, A. D. Bass, D. J. Hunting, and L. Sanche. Effect of gamma radiation and low energy electrons on DNA functionality. The 14th International Workshop on Radiation Damage to DNA (IWRDD) held in Melbourne, Australia on March 20-24, 2016.

S. Kouass Sahbani, P. Cloutier, A. Bass, L. Sanche, D.J. Hunting. Low energy electrons induce lethal lesions in DNA as measured by the loss of plasmid functionality. Gordon Research Conferences, Gordon Radiation Seminar, Proctor Academy, USA, July 12-18, 2014.

S. Kouass Sahbani, P. Cloutier, A. Bass,, D.J. Hunting, L. Sanche. Les dommages aux bases et les dommages multiples localisés de l'ADN double-brins peuvent être induits par les électrons de basse énergie. 25émes Congrès de l'Association Tunisienne des Sciences Biologiques (ATSB), Hammamet, Tunisie, 2014.

S. Kouass Sahbani, M. Rezaee, P. Cloutier, L. Sanche and D.J. Hunting. Radiosensitization of plasmid DNA by cisplatin: enhancement in damage and loss of functionality. 40th Annual Meeting of the European Radiation Research Society, Dublin, Irland, 2013.

Kouass Sahbani Saloua, Pierre Cloutier, Sonia Girouard, Leon Sanche and Darel Hunting. Les cassures doubles brins ne sont pas les lésions létales les plus fréquentes induites par les effets indirects du rayonnement ionisant. 81e congrès de l'ACFAS 2013.

Aloui Amine, Barkaoui Taha, Tahri Wiem, Kouass Sahbani Saloua, El May Alya et Landoulsi Ahmed. Effets de la bile sur la composition phospholipidique membranaire chez le mutant seqA de *Salmonella Typhimurium*. 23ème journées biologiques de l'ATSB, 7 ème Congrès International de Biotechnologie de l'AMB Hammamet, 21-24 Mars 2012.

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Kouass Sahbani Saloua, Kouass Salah and Landoulsi Ahmed. Epigallocatechin-3-gallate protect milk protein against gamma irradiation. 22ème forum des Sciences Biologiques de l'ATSB 28 au 31 Mars 2011.

Kouass Sahbani Saloua, Kouass Salah, Jerbi Taieb, Saidi Mouldi, & Landoulsi Ahmed. Rôle l'acide ascorbique et d'extrait de thé vert (2,5 ; 5 et 10 %) dans la décontamination microbienne et la stabilité des caséines du lait de vache après irradiation par rayonnement gamma. Première journées Scientifiques de l'Association Tunisienne de Toxicologie, 2009 Monastir.

Poster

Kouass Saloua Sahbani, et al., Nursing Care and Responsibilities during Radiation Oncology. International Nursing and Primary Healthcare Conference – 2016, held on Nov 1 – 3, 2016, held in Dubai, UAE.

S. Kouass Sahbani, P. Cloutier, A. Bass, L. Sanche, D.J. Hunting. Low energy electrons induce loss of plasmid functionality by producing lethal lesions in DNA. 62th Radiation Research Society Annual International Meeting, held in Waikoloa Village, Big Island, Hawaii, October 16-19th, 2016.

S. Kouass Sahbani, P. Cloutier, A. D. Bass, D. J. Hunting, and L. Sanche. Effect of Low Energy (0.5– 18 eV) Electrons in the Viability of *E. coli* Transformed by Plasmid DNA. The 14th International Workshop on Radiation Damage to DNA (IWRDD) held in Melbourne, Australia on March 20-24, 2016.

T. Tippayamontri, B. Guerin, R. Lecomte, S. Kouass Sahbani, B. Paquette, and L Sanche.Targeting the DNA of cancer cells in chemoradiation therapy: Intratumoral administration of 5FU chemotherapeutic drug and 18F-FLT positron source in a colorectal cancer mouse model. The 14th International Workshop on Radiation Damage to DNA (IWRDD) held in Melbourne, Australia on March 20-24, 2016.

V. Lemelin, A.D. Bass, S. Kouass Sahbani, P. Cloutier and L. Sanche. Absolute vibrational and electronic cross sections for low-energy electron (1-19 eV) scattering from DNA constituents: condensed tetrahydrofuran (THF). The 14th International Workshop on Radiation Damage to DNA (IWRDD) held in Melbourne, Australia on March 20-24, 2016.

S. Kouass Sahbani. Epigallocatechin-3-gallate protect α and β -casein against gamma irradiation: polyphenol/protein ratio dependant. 61st Radiation Research Soceity Annual Meeting in Weston, Florida, September 19-22, 2015.

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S. Kouass Sahbani, P. Cloutier, A. Bass, L. Sanche, D.J. Hunting. Low energy electrons induce loss of plasmid functionality by producing lethal lesions in DNA. 60th Radiation Research Society Annual Meeting, held in Las Vegas, September 21-24th, 2014.

S. Kouass Sahbani, P. Cloutier, A. Bass, L. Sanche, D.J. Hunting. Low energy electrons induce lethal lesions in DNA as measured by the loss of plasmid functionality. Gordon Research Conferences, Gordon Radiation Chemistry, Proctor Academy, USA, July 12-18, 2014.

T. Tippayamontri, S. Kouass Sahbani, R. Kotb, B. Paquette and L. Sanche, Concomitant chemoradiotherapy with cisplatin, oxaliplatin or their liposomal formulations (Lipoplatin and Lipoxal) in colorectal cancer using nude mouse xenograft. 25émes Congrès de l'Association Tunisienne des Sciences Biologiques (ATSB) 2014, Hammamet.

M. Shi, S. Kouass Sahbani, B. Guérin, D. Fortin, B. Paquette et L. Sanche. Carboplatin-based chemotherapy by convection-enhanced delivery plus radiotherapy in glioma treatment. 25émes Congrès de l'Association Tunisienne des Sciences Biologiques (ATSB) 2014, Hammamet.

S. Kouass Sahbani, M. Rezaee, P. Cloutier, L. Sanche and D.J. Hunting Cisplatin enhances the formation of DNA damage and the loss of functionality induced by ionizing radiation. 59th Annual International Meeting of the Radiation Research Society in New Orleans. 14th to 18th September 2013.

M. Rezaee, S. Kouass Sahbani, D. J. Hunting and L. Sanche. Hydrated electrons induce both DNA single and double strand breaks in the presence of cisplatin. 40th Annual International Meeting of the European Radiation Research Society 2013.

Xiaobin Yao, Shiliang Chen, Yunfeng Chen, S. Kouass Sahbani, Darel Hunting, Yi Zheng and Léon Sanche. DNA damage Induced by gold nanoparticles is Conformation-dependent. 40th Annual International Meeting of the European Radiation Research Society 2013.

S. Kouass Sahbani, Mohammad Rezaee, Pierre Cloutier, Leon Sanche and Darel Hunting. Cisplatine augmente la formation de lésions et la perte de fonctionnalité de l'ADN induites par les rayonnements ionisants. Journée Scientifique, 42e édition, 2013.

Kouass Sahbani Saloua, Pierre Cloutier, Sonia Girouard, Leon Sanche and Darel Hunting. Double strand breaks are not the most frequent lethal lesion created by the indirect effect of ionizing radiation. Gordon Research Conferences, International Meeting, Radiation Chemistry, Proctor Academy, USA, July 28-August 3, 2012.

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Kouass Sahbani Saloua, Pierre Cloutier, Sonia Girouard, Leon Sanche and Darel Hunting. Creation of a lethal DNA lesion by the indirect effect of ionizing radiation at a frequency much higher than for double strand breaks. 12th International Workshop on Radiation Damage to DNA, Prague, Czech Republic, June 2-7, 2012.

Kouass Sahbani Saloua, Pierre Cloutier, Sonia Girouard, Leon Sanche and Darel Hunting. Les cassures doubles brins ne sont pas les lésions létales les plus fréquentes induites par les effets indirects du rayonnement ionisant. Journée Scientifique, 41e édition, Faculté de médecine de Sherbrooke, Université de Sherbrooke, 2012.

Kouass Sahbani Saloua, Troudi Mohamed, Ayari Samia, Ben Bittaeb Nasreddine, Jerbi Taieb, Saidi Mouldi, Mihoub Mouadh & Landoulsi Ahmed. Rôle de l'acide ascorbique dans la décontamination microbienne et la stabilité des caséines du lait de vache après irradiation par rayonnement gamma. 5èmes congrès international de Biotechnologie de l'AMB et 20èmes Forum des sciences Biologique de l'ATSB 2009, Hammamet.

Kouass Sahbani Saloua, Abbes Chiraz, Mihoub Mouadh, Jerbi Taieb, Saidi Mouldi, & Landoulsi Ahmed Rôle d'extrait de thé vert (2,5 %) dans la décontamination microbienne et la stabilité des caséines du lait de vache après irradiation par rayonnements gamma. 19èmes Journées de la SSNT 2009, Hammamet.

Kouass Sahbani Saloua, Kouass Salah, Jerbi Taieb, Saidi Mouldi, & Landoulsi Ahmed. Rôle d'extrait de thé vert (2,5; 5) dans la décontamination microbienne et la stabilité des caséines du lait de vache après irradiation par rayonnement gamma. Colloque Toxicologie Environnementale et Agroalimentaire dans l'espace francophone 2009, Sousse.

Kouass Sahbani Saloua, Kouass Salah, Jerbi Taieb, Saidi Mouldi, & Landoulsi Ahmed. Rôle d'extrait de thé vert (2,5 ; 5 et 10 %) dans la décontamination microbienne et la stabilité des caséines du lait de vache après irradiation par rayonnement gamma. Le premier colloque international sur «les substances bioactives à intérêt économique, Hammamet 2009.

The Canada Gairdner Symposium "Frontiers in Cell Biology" May 27-28, 2015 at the University of Alberta.

Symposium on Novel Targeted Drug and Nanomedicine Approaches to the Radiotherapy of Human Cancers. Presented by the McGill-CIHR Drug Development Training Program – November 30, 2012.

CONFERENCE

Kouass Sahbani Saloua: Manufacture of chemotherapeutic and radiosensitizing agents localizing preferentially in tumors.

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Nuclear medicine and radiobiology department Faculty of Medicine of Sherbrooke.
Janvier 2011.

TEACHING

Oncology at Taibah University, Saudi Arabia

Medical Biochemistry at Taibah University, Saudi Arabia

Medical Microbiology at Taibah University, Saudi Arabia

Pharmacology at Taibah University, Saudi Arabia

Nursing and Healthcare Informatics at Taibah University, Saudi Arabia

Fundamental of nutrition and diet therapy at Taibah University, Saudi Arabia

RESEARCH EXPERIENCE

Master supervisor, Professionnel master, Thesis...

TRAINING

Post-doc fellow, University of Alberta (Health Sciences Centre) (2014-2015).

Ph.D. training, Faculty of Medicine of Sherbrooke: Departement of Radiation Sciences and biomedical imaging (2010/2011).

Ph.D. training, University of Paris11, Orsay: Chemistry Physic Laboratory (2009-2010).

Master training, Faculty of Sciences of Bizerte, Tunisia (2008-2010).

Master training: Radiotraitement Centre (CNSTN) at Sidi Thebet, Tunisia (2008-2010).

Master training: Radiopharmaceutic Laboratory (CNSTN) at Sidi Thebet, Tunisia (2008-2010).

SCHOLARSHIP AND PRIZES

Young Investigator Awardee RRS to attend the 14th International Workshop on Radiation Damage to DNA (IWRDD) to be held in Melbourne, Australia on March 20-24, 2016.

Scholars-in-Training (SIT) Travel Award to the 61st Radiation Reseach Soceity Annual Meeting in Weston, Florida, September 19-22, 2015.

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Scholars-in-Training (SIT) Travel Award to the 60th Radiation Research Society Annual Meeting, to be held in Las Vegas, September 21-24th, 2014.

Gordon Research Conferences Sit Award to participate to the Gordon Research Conferences, Gordon Radiation Seminar, Proctor Academy, USA, July 12-18, 2014.

Gordon Research Conferences Sit Award to participate to the Gordon Research Conferences, Gordon Radiation Chemistry, Proctor Academy, USA, July 12-18, 2014.

Radiation Research Society Sit Award to participate to the 40th Annual Meeting of the European Radiation Research Society 2013.

Scholars-in-Training (SIT) Travel Award to the Radiation Research Society Annual Meeting, to be held in New Orleans, LA September 14-18th, 2013.

Scholarships: I completed a 4-mounth internship in Dept of Department of Radiation Sciences and Biomedical Imaging, Faculty of Medecin and Health Sciences of Sherbrooke, University of Sherbrooke.

Scholarships: to completed a 4-mounth internship in Dept of Department of Radiation Sciences and Biomedical Imaging, Faculty of Medecin and Health Sciences of Sherbrooke, University of Sherbrooke.

Scholarships: to completed a 3-mounth internship in Dept of Laboratory of Chemistry and Physic (LCP) University Paris 11, Orsay.

PEER REVIEWER

- Editorial board member, *Global Journal of Advanced Radiation Research*.

<http://www.synchronizer.com/journals/global-journal-of-advanced-radiation-research/editorial-board>

-Science Domain international.

-African Journal of Agricultural Research...

TECHNIQUES

Microbiological Techniques, Molecular Biology Techniques, Cloning, DNA sequencing, Lentivirus praparation and transfection, Immunohistochemistry, Mammalian Cell Culture, Cell biological assays; ChIP sequencing, WESTERN BLOT, PCR, HPLC, MALDI-TOF, Animals model (nude mouse xenograft), Radiotraitement Techniques.

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PROFESSIONAL ASSOCIATIONS

Radiation Research Society

Association Tunisienne des Sciences Biologiques...

LANGUAGES AND COMPUTER SKILLS

<u>Language :</u>	Arabe	French	English
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Informatic tool : Microsoft Office (Word, Excel, Powerpoint), Adobe , Photoshop, Image Quant, Bioedit ... Scientific research, Music, Swimming, Travel, ...

CURRICULUM VITAE

REFERENCES

Pr. Leon Sanche

Research Chair in the Biomedical Radiation Sciences

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Sherbrooke, QC, Canada, J1H 5N4

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