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Use one or the other here, not both

PROFESSIONAL OBJECTIVE

Apply my basic and translational research experience for the development and evaluation of dynamic products in a research and development team.

PROFESSIONAL PROFILE

Important information, so make this section a separate category

- Formation in basic and translational research.
- Extensive background in molecular and cellular biology, skin biology research, stem cells, virology, gene therapy, topical drug delivery, cream formulation and animal models development.
- Technical skills in DNA, RNA and protein isolation, cloning, PCR, Ligation-Mediated PCR (LMPCR), RT-PCR, microarray RNA preparation, cell culture, virus production, flow cytometry, DNA sequencing, Northern and Western blot, mutation analysis, DNA damage and repair, cell viability assay, ultraviolet light assays, sunscreens' evaluation, bioengineered human skin, histology, immunohistochemistry, microscopy, radio-immunoassays.
- Significant scientific contributions, including publications in *The Proceedings of the National Academy* of Sciences, Cancer Research, Oncogene and Nucleic Acids Research.
- Good network in dermatological science.
- Actively participated in the teaching and supervision of many BS, MS and PhD students. Helpful to highlight

EDUCATION

PhD	Molecular & Cellular Biology	Laval University, Quebec	2000		
	"Photocarcinogenesis: distribution of cyclobutane pyrimidine dimers at DNA level after UV exposure and role of p53, pRB and p21WAF1CIP1 in their repair by nucleotide excision."	← Font too small			
BS	Biochemistry Misspelled word	University of Sherbrooke, Quebec	1995		
PROF	SESSIO <u>NN</u> AL EXPERIENCE	Used "Professional" ab	ove, need different		
Post-I	Doctoral/Research Fellow (Dr. Charles Looney	/ laboratory) more specific categ	ory headings helps		
Derma	atology Branch, National Cancer Institute (NCI)) / NIH employers find i	employers find needed information		
10 Ce	nter Dr, Bethesda, MD, 20892	<mark>("Leadership," "Tech</mark>	nical Writing," etc.)		
(Gove	rnment Research Institute)				

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- Developed successfully a long-term treatment of hypertension by human skin gene therapy using a bicistronic retroviral vector expressing the anti-hypertensive atrial natriuretic peptide (ANP) and the multi-drug resistance gene combined to topical colchicine selection.
- Co-supervised two medical students on a clinical project looking at gene expression after UV exposure using microarrays technology.
- Collaborated with colleagues to teach and learn laboratory techniques as well as to design or improve theoretical understanding.
- Improved oral and written communication by giving oral presentations at many scientific meetings, as well as completing a workshop in « Writing about Science ».
- Developed network in dermatological research.

Post-Doctoral Fellow (Dr. Arnold Palmier laboratory)

07/2000 - 08/2002

Guy-Bernier Research Center, Hôpital Maisonneuve-Rosemont5415, Boulevard de l'Assomption, Montreal, Qc, H1T 2M4

- Demonstrated the role of p53 in the transcription-coupled nucleotide excision repair is UV wavelength-dependent.
- Established LMPCR technique in the laboratory.
- Trained MS and PhD students to use LMPCR technique.
- Cooperated with colleague in the organization and funding of research center social events.
- Served as a supervisor for Invitrogen Inc. supply center to advise customer about Invitrogen products and maintain upto-date inventory as well as process orders.

Ph.D. Student (Dr. Didier Renaud laboratory) Laval University. Quebec, Canada Research Center St-François d'Assise 10, rue de l'Espinay, Quebec, Qc, G1L 3L5

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• Developed and executed an independent research project studying UV DNA damage and repair after sunlight exposure.

- Measured sunscreens' efficacy using human skin equivalents as *in vitro* model.
- Adapted a non-isotopic labeling approach to reveal LMPCR autoradiogram.
- Supervised and taught graduate and post-graduate students.
- Developed computer skills in PC and Mac platforms and software as well as created and updated our student association's webpage.
- Co-chaired the platform session on Photocarcinogenesis, 27th annual meeting of American Society for Photobiology (ASP), Washington, DC.

FELLOWSHIPS

Quotes unnecessary here -

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07/2005 - 09/2007 "Fellowship": Post-Doctoral Visiting Fellow Research Fellowship, NCI, NIH.

07/2002 - 06/2005 "**Fellowship**": Canadian Institutes of Health Research, Grant # 200204MFE-102402-58433.

07/2000 - 07/2002 "**Fellowship**": National Cancer Institute of Canada, Terry Fox Grant # 011486.

AWARDS & HONORS

- 05/2008 "Albert M. Kligman Travel Fellowship" from Society of Investigative Dermatology.
- 07/2000 "Associate Member Travel Grant Award Competition" from ASP.
- 02/2000 "National Cancer Institute of Canada student travel award".
- 07/1999 "Associate Member Travel Grant Award Competition" from ASP.
- 03/1999 "AACR-AFLAC Scholar in Cancer Research Award".
- 07/1998 "Associate Member Travel Grant Award Competition" from ASP.
- 03/1998 "AACR-Glaxo Wellcome Oncology Research Scholar Award".
- 10/1996 **Best presentation** at the Carlton-Auger Scientific Day of the Department of Pathology of Laval University.

PROFESSIONAL SOCIETIES

American Association for Cancer Research (AACR) American Society for Photobiology (ASP) American Society of Gene Therapy (ASGT) Society of Investigative Dermatology (SID)

PUBLICATIONS

Putting your name in bold in lists of publications — helps the reader find information more quickly.

- « Selectable bicistronic vectors in skin gene therapy » Scheidemann F, Cook D, Pfützner W. Archives of Dermatological Research (2008) (online publication, July 29)
- « The skin as a biofactory for systemic secretion of erythropoietin: potential of genetically modified keratinocytes and fibroblasts » Scheidemann F, Löser M, Niedermeier A, Kromminga A, Cook D, Vogel JC, Pfützner W. *Experimental Dermatology* (2008) 17(6):481-8
- « An approach to achieve long-term expression in skin gene therapy » **Cook D**, Pfützner W, Vogel JC. *Toxicologic Pathology* (2008) 36(1):104-11
- « UV wavelength-dependent regulation of transcription-coupled nucleotide excision repair in p53-deficient human cells » Mathonnet G, Leger C, Desnoyers J, Drouin R, **Cook D**, Drobetsky EA. *Proceedings of the National Academy of Sciences* (2003) 100(12):7219-24
- « UVA-induced cyclobutane pyrimidine dimers form predominantly at thymine-thymine dipyrimidines and correlate with the mutation spectrum in rodent cells » Rochette PJ, **Cook D**, Drouin R, Perdiz D, Bastien N, Drobetsky EA, Sage E. *Nucleic Acids Research* (2003) 31(11):2786-94
- « Human cells bearing homozygous mutations in the DNA mismatch repair genes hMLH1 or hMSH2 are fully proficient in transcription-coupled nucleotide excision repair » Rochette PJ, Bastien N, McKay BC, Cook D, Drobetsky EA, Drouin R. Oncogene (2002) 21(37):5743-52
- « Repeated exposures of human skin equivalent to low doses of ultraviolet-B radiation lead to changes in cellular functions and accumulation of cyclobutane pyrimidine dimers » Chouinard N, Cook D, Mitchell DL, Robert M, Drouin R, Rouabhia M. *Biochemistry and Cellular Biology* (2001) 79(4):507-15
- « In vivo DNA analysis » Drouin R, Cook D, Angers M, Ouellet S. Second edition of Methods in Molecular Biology, Protein-DNA Interaction Protocols, Humana Press (2001) 148:175-219.
- « Ablation of p21waf1cip1 expression enhances the capacity of p53-deficient human tumor cells to repair UVB-induced DNA damage » Cook D, Loignon M, Drouin R, Drobetsky EA. *Cancer Research* (2001)_ 61(9):3781-6
- « Human cells compromised for p53 function exhibit defective global- and transcription coupled-nucleotide excision repair whereas cells compromised for pRb function are defective only in global repair » Cook D, Drouin R, Baril C, Drobetsky EA. *Proceedings of the National Academy of Sciences* (1999) 96(26):15038-43
- « A digoxigenin-based method using chemiluminescence to detect DNA sequence ladders on large nylon membranes » Cook D, Bissonauth V, Drouin R. *Biochemica* (1999) 2:22-24 <u>https://www.roche-applied-science.com/techresources/app_supp.jsp?id=010900</u>
- « The Multilayered Organization of Engineered Human Skin Does Not Influence the Formation of Sunlight-Induced Cyclobutane Pyrimidine Dimers in Cellular DNA » Cook D, Rouabhia M, Drobetsky EA, Drouin R. *Cancer Research* (1999) 59(2):285-9
- « UVB-induced cyclobutane pyrimidine dimer frequency correlates with skin cancer mutational hotspots in *p53* » Drouin R, **Cook D**. *Photochemistry and Photobiology* (1997) 66(5):719-26

ORAL PRESENTATIONS

Make sure indentation is consistent.

• 06/2007 Invited speaker at the 26th annual symposium of the Society of Toxicologic Pathology. « Gene therapy targeting skin and keratinocyte stem cells », Session C : Genetically Based Therapies. Rio Grande, PR.

- 05/2007 Cook D, Terunuma A, Tock CL, Pfützner W, Ohyama M, Vogel JC: Skin gene therapy: systemic delivery of the anti-hypertensive ANP by genetically modified human skin equivalents. 68th Annual meeting of the SID, Los Angeles, CA. (Was acknowledged in the annual meeting «highlight» report, Journal of Investigative Dermatology (2007), 127, 2073-2076.)
- 06/2005 **Cook D**, Tock CL, Ohyama M, Vogel JC: A skin gene therapy approach to treat hypertension using long-term expression and systemic delivery of ANP from the skin. 8th Annual meeting of the ASGT, St-Louis, MO.
- 07/2000 **Cook D**, Loignon M, Drouin R, Drobetsky EA: P21waf1-mediated inhibition of DNA repair in p53deficient human cells following treatment with UVB. 13th International Congress on Photobiology and 28th Annual Meeting of the ASP, San Francisco, CA.
- 07/1999 **Cook D**, Drouin R, Drobetsky EA: The role of p53 and downstream effectors in the control of nucleotide excision repair rates in UV-irradiated human cells. 27th Annual Meeting of the ASP, Washington, DC.

ELECTED POSTER PRESENTATIONS

With dates in the margin and blank lines between each entry, bullet points are unnecessary.

- 05/2008 **Cook D**, Kim SM, Terunuma A, Qin, Y, Tock CL, Pfuztner W, Schnermann J, Vogel JC: Human skin gene therapy can be used to deliver anti-hypertensive ANP in order to prevent blood pressure elevation in high-salt diet immunocompromised mice. The International Investigative Dermatology, Kyoto, Japan.
- 05/2006 **Cook D**, Tock CL, Ohyama M, Vogel JC: Development of genetically modified human skin equivalents for systemic in vivo delivery of ANP for the treatment of hypertension. 67th Annual meeting of the SID, Philadelphia, PA.
- 04/2000 **Cook D**, Drouin R, Drobetsky EA: The role of p21waf1 in the control of nucleotide excision repair rates in UV-irradiated human cells. 91th Annual meeting of the AACR, San Francisco, CA.
- 04/1999 **Cook D**, Drouin R, Drobetsky EA: Influence of the p53 regulatory pathway on the rate of nucleotide excision repair in UV-irradiated human cells. 90th Annual meeting of the AACR, Philadelphia, PA.
- 07/1998 Cook D, Rouabhia M, Drobetsky EA, Drouin R: Can cyclobutane pyrimidine dimers be a possible molecular link between sunlight exposure and p53 mutational hotspots in nonmelanoma skin cancer. 26th Annual meeting of the ASP, Snowbird, UT.

- 03/1998 **Cook D**, Rouabhia M, Drobetsky EA, Drouin R: Sunlight irradiation of engineered human skin substitutes: high cyclobutane pyrimidine dimer frequency at mutational hotspots in p53. 89th Annual meeting of the AACR, New Orleans, LA.
- 04/1997 **Cook D**, Lin J, Dallaire N, Lloyd RS, Drouin R: Mapping of cyclobutane pyrimidine dimers: comparative distribution at the sequence level after UVB and UVC irradiation of cells and purified DNA. 88th Annual meeting of the AACR. San Diego, CA.
- 04/1997 Drouin R, **Cook D**: Methylation of PyCpG sites in the human p53 gene dramatically increases cyclobutane pyrimidine dimer frequency after UVB irradiation. 88th Annual meeting of the AACR. San Diego, CA. (**Poster Discussion Session**).

* Numerous other poster presentations (>30) available upon request.]►	I his phrase may also be used after a publications category.

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REFERENCES	←──	Not required,	but ok to	use if desir

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- Dr. Charles Looney, M.D. Senior Investigator, Dermatology Branch National Cancer Institute, NIH Bldg. 10 / Room 12N260 10 Center Drive, MSC 1908 Bethesda, MD, 20892-1908 Phone: (301) 496-9002 Fax (301) 496-5370 Email: jonvogel@mail.nih.gov