

FELLOWSHIP IN CONTACT DERMATITIS

TYPE OF FELLOWSHIP: One-year clinical fellowship

• **Number of fellowship positions requested:** One

• **Name of hospitals involved in training:**

Montreal General Hospital – 100% of time spent by fellow
1650 Cedar Avenue, Montréal, QCH3G 1A4, CANADA

NAME OF THE FELLOWSHIP PROGRAM DIRECTOR:

Dr. Denis Sasseville

NAMES OF THE TEACHING FACULTY:

Dr. Denis Sasseville, MD, FRCPC Tel: 514-934-1934, ext. 34648 e-mail: denis.sasseville@mcgill.ca. Director of the Contact Dermatitis Clinic, Royal Victoria Hospital, 1989-2015, and now Montreal General Hospital. Areas of interest: Plant contact dermatitis, Occupational contact dermatitis

Dr. Linda Moreau, MD, FRCPC Tel: 514-934-1934, ext. 34648 e-mail: linda.moreau@mcgill.ca. Director, Division of Dermatology and Program Director since 2011. Associate dermatologist, Contact Dermatitis Clinic, Royal Victoria Hospital, since 2005. Director of the Leg Ulcer Clinic, Montreal General Hospital. Areas of interest: Contact dermatitis to plastics, glues and rubber, Contact dermatitis to topical medicaments. In addition, she acts as a medical expert for the Bureau d'Évaluation Médicale of the Québec Ministry of Labor

Dr. Monica Stanciu, MD, FRCPC Tel: 514-934-1934, ext. 34648 e-mail: monica.stanciu@mail.mcgill.ca. Assistant dermatologist. Area of interest: Cutaneous adverse drug reactions

Mission:

The year of fellowship in contact dermatitis enables the student to gain knowledge and develop expertise in the diagnosis, evaluation and management of cutaneous contact reactions. The training will promote aptitudes of competence and leadership in the operation of a busy contact dermatitis clinic, as well as in research, publications, presentations and teaching activities related to the field of contact dermatitis.

Objectives:

Upon completion of training, the clinical fellow must have acquired a vast body of knowledge, perfected the technical skills and developed the professional attitudes expected of an expert in the field of contact dermatitis, and detailed as follows according to the CanMeds framework of competencies:

1. Medical expert

a) Acquisition of basic and clinical sciences pertinent to the pathophysiology and clinical manifestations of:

- Irritant and allergic contact dermatitis
- Immunological and non-immunological contact urticaria
- Phototoxic and photoallergic contact dermatitis
- Occupational dermatoses
- Drug eruptions

b) Consolidation of notions of immunology, chemistry, physics, botany and occupational processes needed for the accurate assessment and management of contact dermatitis.

c) Strengthening of clinical skills in diagnosing cutaneous contact reactions through the appropriate use of the history of exposure to contactants, the occupational history, and the physical examination as it pertains to contact dermatitis.

d) Development of principles of treatment of the various forms of cutaneous reactions to contactants.

e) Knowledge of the terminology, chemistry, sources of exposure and cross-reactions for all common and for a large number of the less common contact irritants and allergens.

f) Knowledge of the technique of patch testing and photopatch testing, including sources of supplies and materials, patient selection, and interpretation of results.

g) Knowledge of Material Safety Data Sheets, their contents and how to extract useful information from them.

h) Competence in the preparation of non-standardized allergens.

i) Knowledge of various ancillary techniques, such as the dimethylglyoxime spot test for nickel, plant visiting, etc.

2. Communicator

a) Ability to communicate with patients and their families, more specifically to explain in plain language the nature of allergens and irritants, their sources of exposure and methods of avoidance.

b) Skills to interact effectively with referring physicians, other health professionals and the public.

3. Collaborator

a) Readiness to function effectively as consultant to provide optimal guidance in suspected or proven cases of contact dermatitis.

b) Development of teaching skills to junior residents and rotators, as well as to other physicians, including other experts in contact dermatitis.

4. Manager

a) Ability to function in an organized and orderly fashion.

b) Cost-effective use of the supplies provided by the clinic.

c) Ability to supervise the material aspect of a patch test clinic: when and from whom to order supplies and allergens, devise and print handout materials, instruction sheets, etc.

5. Health advocate

a) Capacity to counsel patients on avoidance of allergens and irritants, preventive measures, etc.

b) Willingness to participate in awareness campaigns, public forums and legislation to reduce exposure to noxious allergens and irritants.

6. Scholar

a) Motivation to become familiar with the dermatological literature relevant to the field of contact dermatitis.

b) Eagerness to contribute to the advancement of the science of contact dermatitis through research and publications in peer-reviewed journals.

c) Active participation in scientific societies, as a speaker or as member of various committees.

7. Professional

a) Understanding of the patients' psychological, occupational and social needs, taking into account diversities of race, culture and gender. These qualities are especially important in the assessment of the impact of occupational dermatoses on the patients' quality of life and economic situation.

b) Knowledge of the ethical and medico-legal aspects of the expertise in contact dermatitis, including the ability to accurately complete all insurance forms and workman's compensation reports relevant to patient's impairment. As was seen during Dr. Moreau's, Dr. Al-Sowaidi's, Dr. Stanciu's, both Drs. Alfalah's, and Dr.

Al-Ali's fellowships, the presence of a fellow has a great impact on residents' training, as the fellow is usually charged with multiple tasks pertaining to teaching the essentials of contact dermatitis through direct supervision and a series of lectures presented at Dermatology Rounds.

ACADEMIC FACILITIES:

The Contact Dermatitis Clinic occupies a large room on the 19th floor of the Montreal General Hospital (Room E19-149). It contains a refrigerator and a metal filing cabinet to store over 400 allergens and other supplies for patch testing, record-keeping documents, textbooks and patients' instruction sheets.

There is a computer that can be used to log-in on the websites and various databases provided by various contact dermatitis associations and patch test materials suppliers.

The computer also holds the Contact Dermatitis Clinic database. In this database are entered the demographics, patch tests technique, results and final diagnoses of all patients seen in the clinic over the past 15 years. Paper records are kept for all patients seen since 1989. In addition, up to date textbooks and journals (Contact Dermatitis, Dermatitis) are available. All current and past issues of these two journals are available electronically as well.

The Division of Dermatology research lab (Glen site, Room EO22137) becomes on occasion a chemistry laboratory where are kept and used the necessary supplies and tools to mix and dilute non-standard allergens.

FELLOW DUTIES AND RESPONSIBILITIES:

1. Mandatory activities

a) Call duty and responsibilities towards residents

There will be no call duty during the year of fellowship Fellow will be senior supervisor of residents who are assigned to the Contact Dermatitis Clinic: His role will be active tutoring and ensuring that residents acquire the basic notions of contact dermatitis.

b) Contact Dermatitis Clinic, Montreal General Hospital, Room E19-149

Mondays, 9:00 AM to 4:00 PM, Wednesdays, 9:00 AM to 4:00 PM, Thursdays, 1:00 to 4:00 PM, Fridays, 9:00 AM to 5:00 PM

Fellow is expected to participate in the interview of patients, perform physical examinations, learn to prepare and apply patch tests, take records of patients'

demographics, patch tests procedures and test results for future entry in the computerized database.

c) Attendance at Rounds

Thursdays, 9:00 to 12:00 AM, MGH, JGH or selected sites for meetings of the Montreal Dermatological Society

d) Resident and staff teaching

Fellow will give some lectures, of variable lengths, from an existing bank of presentations on contact dermatitis, or from work of his/her own choice.

e) Research and Publications

Fellow will actively participate in any ongoing research, such as gathering of data, recruitment of patients, chart reviews and procedures. Fellow will be required to submit at least one article for publication in Contact Dermatitis or Dermatitis. This publication can be a case report, a research study or a review article.

2. Recommended activities

a) Annual Meeting of the American Contact Dermatitis Society

b) Annual Meeting of the Canadian Dermatology Association

c) Practicum in Occupational Diseases (Oral examination for students in the Distance Education Program, McGill University Dept. of Occupational Health and Biostatistics), Occasionally in November , Montreal

d) Biennial meeting of the European Society of Contact Dermatitis

e) One month of elective in another renowned Contact Dermatitis Clinic, in Canada, in the U.S.A. or in Europe.

CURRICULUM:

1. Intended case load

The clinic sees an average of 15 patch test patients per week, for a yearly total of \pm 460-500 patients (1380-1500 clinic visits). In addition, approximately 15-20 patients are evaluated each week prior to patch test scheduling.

Roughly 20-25% of patients present with occupational contact dermatitis.

2. Reading materials: Books

- a) Rietschel RL, Fowler JF Jr., Fisher's Contact Dermatitis, 6th Edition. BC Decker, Hamilton, ON, Canada, 2008.
- b) Marks JG, DeLeo VA, Elsner P. Contact and Occupational Dermatology, 3rd edition. Mosby, St. Louis, 2003.
- c) Johansen JD, Frosch PJ, Lepoittevin JP. Contact Dermatitis, 5th edition. Springer, Berlin, 2011.
- d) Guin JD. Practical Contact Dermatitis. A Handbook for the Practitioner. McGraw-Hill, New York, 1995.
- e) De Groot AC. Patch Testing. Test Concentrations and Vehicles for 4350 Chemicals, 3rd edition. acdegroot publishing 2008. Wapserveen, The Netherlands, 2008.
- f) Kanerva L, Elsner P, Wahlberg JE, Maibach HI. Handbook of Occupational Dermatology, Springer, Berlin, 2000.
- g) Adams RM. Occupational Skin Disease, 3rd edition. W.B. Saunders, Philadelphia, 1999.
- h) Benezra C, Ducombs G, Sell Y, Fousserau J. Plant Contact Dermatitis. B.C. Decker, Toronto, 1985.

3. Journals

- a) Contact Dermatitis. Jon Wiley & Sons, Oxford, England . Official Journal of the ESCD
- b) Dermatitis. Wolters Kluwer Health, Hagerstown, MD, USA, Official Journal of the ACDS and the ICDRG

4. Websites

- a) www.contactderm.org: web site of the American Contact Dermatitis Society.
- b) <http://bodd.cf.ac.uk>: Electronic version of Mitchell & Rook Botanical Dermatology
- c) <http://www.escd.org>: website of the European Society of Contact Dermatitis

EVALUATION:

1. Fellows will be evaluated every 3 months by consensus of teaching faculties. Acquisition and development of CanMeds competencies will be assessed and reported on evaluation sheets similar to those used for other residents in the training program. Evaluations will be verbally discussed with the Fellowship Director and presented at the Residency Program Committee.

2. The fellowship program will be evaluated once a year, using a form similar to that used by residents to evaluate the residency program. Once completed, this evaluation will be submitted directly by the fellow to the Residency Program Director who will subsequently present it to the Residency Program Committee.

• **Background:**

For over 38 years, the Division of dermatology at the Royal Victoria Hospital has been operating a specialty clinic dedicated to the assessment and investigation of contact dermatitis. During the past 28 years, under the leadership of Dr. Denis Sasseville, this clinic has expanded its activities, acquired a large bank of allergens for patch testing and attracted an increasing number of referred patients. With the cessation of similar activities in the hospitals affiliated to Université de Montréal, the Contact Dermatitis Clinic of the MUHC has become the main center in the province that offers comprehensive evaluation of complex cases of contact dermatitis, including preparation and testing of non standardized allergens and materials from workplaces. In March of 2015, with the closing of the Royal Victoria Hospital, the contact dermatitis clinic has moved to the Montreal General Hospital.

Already three McGill-trained dermatologists, one dermatologist graduating from Université Laval and two Saudi dermatologists had the privilege of doing a one-year fellowship in contact dermatitis under the supervision of Dr. Denis Sasseville:

• Dr. Linda Moreau completed her clinical fellowship between January 2004 and January 2005. During that year, she rounded up her education with a one-month rotation in Pr. An Goossens' contact dermatitis clinic in Leuven, Belgium. Dr. Moreau is now a member of the MUHC Division of Dermatology and an active participant and teacher in the Contact Dermatitis Clinic.

• Dr. Mowza Al-Sowaidi was a clinical fellow between September 2005 and September 2006. She spent one month in Dr. Magnus Bruze's laboratory and contact dermatitis clinic in Malmö, Sweden, before returning to her home in Abu-Dhabi.

° Dr. Monica Stanciu completed her fellowship between September 2012 and August 2013. She spent one month in Nancy, France, under the supervision of Pr. Annick Barbaud, where she perfected the techniques of investigation for drug eruptions. Dr. Stanciu is now part of the MUHC Division of Dermatology with expertise in contact dermatitis.

° Dr. Khuzama Al-Falah from Riyadh, Saudi Arabia, completed the fellowship between July 2013 and June 2014. She spent one month at the St. John's Institute of Dermatology in London, under the supervision of Dr. Ian White.

° Dr. Maisa Al-Falah from Riyadh, Saudi Arabia, completed the fellowship between January 12, 2015 and January 11, 2016.

° Dr. Aisha Al Ali, a recent McGill graduate, has enrolled in the fellowship program in June 2016.

• **Research activity:**

Dr. Sasseville's expertise in contact dermatitis is now recognized worldwide. He is member of the European Society of Contact Dermatitis (ESCD), and member and former vice-president of the American Contact Dermatitis Society (ACDS). He has been invited to join the ranks of three research groups:

• Since March 2001, he is a member of the North American Contact Dermatitis Group (NACDG). This group of 13 North American experts monitors trends in contact dermatitis and regularly publishes the results of retrospective cohort studies on various aspects of contact dermatitis. The group is also involved in prospective clinical studies and has completed a "Glove allergen study" sponsored by the U.S. National Institute for Occupational Safety and Health (NIOSH).

• In June 2003, he was invited to become a corresponding member in the Groupe d'Etudes et de Recherches en Dermato-Allergologie (GERDA), a research group from French-speaking countries. He has since presented every year at the annual meeting.

• In November 2005, Dr. Sasseville was selected to become a member of the International Contact Dermatitis Research Group (ICDRG), a group that sets the standards for patch testing techniques and allergens.

In addition, Dr. Sasseville was involved in completed or ongoing research projects pertaining to contact dermatitis:

° Ongoing projects include:

° **"Allergic contact dermatitis and filaggrin mutations"**. This multicenter study led by Dr. Peter Hull, formerly from Saskatoon, now in Halifax, was recruiting patients with multiple allergic contact sensitizations to see if they harbor mutations in filaggrin or other components of the cornified epidermal envelope. Recruitment is now closed and data are under analysis.

- **“ICDRG study on patch testing a mix of 4 mercapto compounds with a high concentration of 2-mercaptobenzothiazole”**. This multicenter international study aims to evaluate the performance of a new mercapto mix.
- **“ICDRG study on patch testing with a mix of MCI/MI with a high concentration of methylisothiazolinone”**. This multicenter international study aims to evaluate the performance of a new MCI/MI mix.

Past research activities included:

- **“ICDRG study on the results of patch testing with a resol resin based on phenol and formaldehyde, PFR-2, in the baseline series”**. This multicenter international study initiated by Dr. Marlène Isaksson and Dr. Magnus Bruze from Malmö, Sweden, investigated the prevalence of contact allergy to PFR-2 by routinely patch testing all patients presenting for evaluation of contact dermatitis over a period of 6 months. Results were published in *Dermatitis*.
- **“ICDRG study on disperse dyes in a textile dye mix”**. This multicenter international study looked at the accuracy of a textile dye mix at detecting sensitization to textile dyes, versus testing with its individual components. The manuscript was published in *Dermatitis*, with lead author Dr. Marlène Isaksson from Malmö, Sweden.
- Sponsored by the Institut de Recherche en Santé et Sécurité au Travail (IRSST), and with Dr. Caroline Duchaine, Dr. Yvon Cormier, Mr. Jacques Lavoie and Dr. Yves Poulin as co-investigators from Université Laval, Québec City, this study assessed the respiratory and cutaneous problems of metal workers, and was entitled **“Evaluation de l’exposition aux aérosols et effets sur la santé respiratoire et cutanée des travailleurs exposés aux fluides de coupe de métaux”**.
- Involving Dr. Linn Holness, Mr. Gary Liss, Dr. Susan Tarlo, Dr. Melanie Pratt and Mrs. Irena Kudla, from Toronto and Ottawa, this study sponsored by the Workplace Security and Insurance Board of Ontario (WSIB) and entitled **“Key exposures causing work-related allergic contact dermatitis and evidence for dual causation of occupational asthma”**, explored potential relationships between cutaneous and pulmonary hypersensitivity.
- **“Clinically-Based Skin Disease Surveillance Project”** An epidemiological, prospective study that surveyed the causes, economic impact and quality of life of occupational dermatitis over a 12-month period. Sponsor: U.S. National Institute of Occupational Safety and Health (NIOSH). Investigators: Members of the NACDG.

- **“A survey of the allergenicity of a new fragrance material: 3- and 4-(4-hydroxy- 4-methyl-pentyl)-cyclohexene-1-carboxaldehyde (HMPCC or Lyral®)”**. A prospective patch testing survey of consecutive patients tested to 3 different concentrations of HMPCC. Sponsor: Research Institute of Fragrance materials (RIFM). Investigators: Members of the NACDG.

- **“Cross-reactions patterns between Potassium Amyl Xanthate (KAX), Sodium Isopropyl Xanthate (NaIX), Carbamates and Thiurams”**. A prospective study in which all patients seen in the patch test clinic of the MUHC were tested to NaIX and KAX, products used in the mining industry that have a chemical structure similar to thiurams and carbamates used in rubber goods. Non-sponsored, self-initiated research project.

- **Publications:**

1. Sasseville D, Nguyen KH. Allergic contact dermatitis from *Rhus toxicodendron* in a phytotherapeutic preparation. *Contact Dermatitis* 1995;32:182-183.
2. Sasseville D, Carey WD, Singer MI. Generalized contact dermatitis from acetarsone. *Contact Dermatitis* 1995; 33: 431-432.
3. Sasseville D, Balbul A, Kwong P, Yu K. Contact sensitization to pyridine derivatives. *Contact Dermatitis* 1996; 35: 100-101.
4. Sasseville D, Al-Khenaizan S. Occupational contact dermatitis from ethylenediamine in a wire-drawing lubricant. *Contact Dermatitis* 1997; 36: 228-229.
5. Sasseville D, Tennstedt D, Lachapelle JM. Allergic contact dermatitis from hydrocolloid dressings. *Am J Contact Dermat* 1997; 8: 236-238.
6. Sasseville D. Contact urticaria from epoxy resin and reactive diluents. *Contact Dermatitis* 1998; 38: 57- 58.
7. Sasseville D, Kwong P, Yu K. Narrow spectrum of cross-sensitization with pyridine derivatives. *Contact Dermatitis* 1998; 38: 212-214.
8. Sasseville, D. Phytodermatitis. *J Cutan Med Surg* 1999: 3: 263-279.
9. Sasseville D, Geoffrion G, Lowry RN. Allergic contact dermatitis from chlorinated swimming pool water. *Contact Dermatitis* 1999: 41: 347-348.
10. Sasseville D, Moreau L, Brassard J, Leclerc G. Allergic contact dermatitis to epoxy-based microscopy immersion oil: Cases from Canada. *Am J Contact Dermat* 2000: 11: 99-103.
11. Khanna M, Qasem K, Sasseville D. Allergic contact dermatitis to Tea Tree Oil with erythema multiforme-like id reaction. *Am J Contact Dermat* 2000: 11: 238-242.
12. Sasseville D. Exacerbation of allergic contact dermatitis to amcinonide triggered by patch testing. *Contact Dermatitis* 2001: 45: 232-233.
13. Khanna M., Sasseville D. Occupational contact dermatitis to textile dyes in airline personnel. *Am J Contact Dermatitis* 2001: 12: 208-210.
14. Lee HN, Pokorny CD, Law S, Pratt M, Sasseville D, Storrs FJ. Cross-reactivity among epoxy acrylates and Bisphenol F epoxy resins in patients with Bisphenol A epoxy resin sensitivity. *Am J Contact Dermatitis* 2002: 13: 108-115.
15. Sasseville D, Hakim M, Muhn C. Bus Pass Dermatitis. *Am J Contact Dermatitis* 2002: 13: 146-147.
16. Marcoux D, Couture-Trudel PM, Riboulet-Delmas G, Sasseville D. Sensitization to paraphenylenediamine from a streetside temporary tattoo. *Pediatr Dermatol* 2002: 19 (6): 498-502.
17. Muhn C, Sasseville D. Occupational allergic contact dermatitis from 1,2-benzisothiazolin-3-one without cross-reaction to other isothiazolinones. *Contact Dermatitis* 2003: 48: 230-231.
18. Freiman A, Al-Layali A, Sasseville D. Patch testing with thimerosal in a Canadian center: an 11-year experience. *Am J Contact Dermatitis* 2003; 14: 138-143.

19. Sasseville D, Muhn CY, Al-Sowaidi M. Occupational allergic contact dermatitis from xanthates and carbamates in mining processes. *Am J Contact Dermatitis* 2003; 14: 166-168.
20. Fowler JF, Zug KM, Taylor JS, Storrs FJ, Sherertz EA, Sasseville D, Rietschel RL, Pratt MD, Mathias CGT, Marks JG, Maibach HI, Fransway AF, DeLeo VA, Belsito DV. Allergy to cocamidopropyl betaine and amidoamine in North America. *Dermatitis* 2004; 15: 5-6.
21. Sasseville D. Hypersensitivity to preservatives. *Dermatol Ther* 2004; 17(3): 251-263.
22. Sasseville D, Moreau L. Contact allergy to 1-bromo-3-chloro-5,5-dimethylhydantoin in spa water. *Contact Dermatitis* 2004; 50: 323-324.
23. Moreau L, Sasseville D. Allergic contact dermatitis from cocamidopropyl betaine, cocamidoamine, 3-(Dimethylamino) propylamine, and oleamidopropyl dimethylamine: Co-reactions or cross-reactions? *Dermatitis* 2004; 15: 146-150.
24. Militello G, Sasseville D, Ditre C, Brod B. Allergic contact dermatitis from isocyanates among sculptors. *Dermatitis* 2004; 15: 150-153.
25. Pratt MD, Belsito DV, DeLeo VA, Fowler JF Jr., Fransway AF, Maibach HI, Marks JG, Mathias CGT, Rietschel RL, Sasseville D, Sherertz EF, Storrs FJ, Taylor JS, Zug K. North American Contact Dermatitis Group patch-test results, 2001-220 period. *Dermatitis* 2005; 15(4): 176-183.
26. Sasseville D, Moreau L. Allergic contact dermatitis from triphenyl phosphite. *Contact Dermatitis* 2005; 52: 163-164.
27. Sasseville D, Moreau L. Allergic contact dermatitis from triethanolamine polypeptide oleate condensate in eardrops and shampoo. *Contact Dermatitis* 2005; 52: 233.
28. Moreau L, Alomer G, Sasseville D. Contact urticaria from carboxymethylcellulose in white chalk. *Dermatitis* 2006; 17:27-31.
29. Belsito DV, Fowler JF Jr, Sasseville D, Marks JG Jr, DeLeo VA, Storrs FJ. Delayed-type hypersensitivity to fragrance materials in a select North American population. *Dermatitis* 2006;17:23-28.
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36. Rietschel RL, Warshaw EM, Sasseville D, Fowler JF, DeLeo VA, Belsito DV, Taylor JS, Storrs FJ, Mathias CGT, Maibach HI, Marks JG, Zug KA, Pratt M. Sensitivity of petrolatum and aqueous vehicles for detecting allergy to imidazolidinylurea, diazolidinylurea, and DMDM hydantoin: A retrospective analysis from the North American Contact Dermatitis Group. *Dermatitis* 2007; 18(3): 155-162.
37. Zug KA, Pratt M. Sensitivity of petrolatum and aqueous vehicles for detecting allergy to imidazolidinylurea, diazolidinylurea, and DMDM hydantoin: A retrospective analysis from the North American Contact Dermatitis Group. *Dermatitis* 2007; 18(3): 155-162.
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