



Universitatea *Transilvania* din Braşov

**HABILITATION THESIS
SUMMARY**

**Rosacea and topical steroids induced facial dermatitis - clinical,
dermoscopy and spectrometry perspectives on the skin microbiome**

Domain: Medicine

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Firstly, I must mention that after the presentation of my PhD thesis, I subsequently extended the dermoscopic observation at all the cutaneous/skin structures- hair, nails, mucous extremities but also in various nonpigmentary pathologies. I assigned an important part of my professional academic, scientific and research activity to facial rosacea dermatitis induced by the prolonged use of topical corticosteroids in order to observe the earliest facial manifestations and succeed in managing and monitoring the post-cortisone situation. I studied skin microbiome in manifestations connected with Demodex Folliculorum: primary demodicidosis, rosacea, steroid-induced rosacea. The little data in the literature related to the isolation of Bacillus Oleronius from only one Demodex Folliculorum, the good response to antibiotics in Rosacea and the possibility of precise bacteriological identification by Mass Spectrometry (MALDI-TOF) made me focus on this segment in particular, without neglecting the dermoscopy related fields, comorbidities from rosacea and nevi, particularly halo nevi, vitiligo and their comorbidities, adverse reactions to medicines with cutaneous impact. I described the dermoscopic manifestations of Rosacea and its main comorbidities, steroid Rosacea and criteria of dermoscopic diagnosis for Demodex Folliculorum. The main original contributions in the field of Dermatology targeted for the first time in the specialty literature the isolation and identification through mass spectrometry of some other bacteria from Demodex Folicullorum different from Bacillus Oleronius, namely: Bacillus Simplex in primary Demodecidosis, Bacillus Cereus in steroid-induced Rosacea and Bacillus Pumilus in Rosacea. Their discovery was the result of researches carried out continuously and especially within postdoctoral research project won in the national competition of projects - „The study of clinical, dermoscopy, laboratory and histopathological correlations regarding the role of Demodex Folicullorum of Bacilus Oleronius and the serum level of phosphate Riboflavin in the ethiopathogeny of Rosacea and in post-steroid facial dermatitis” within a vast project - „Postdoctoral and doctoral research, priority of Romanian higher education (Doc-Postdoc)", co-funded in POSDRU 2007-2013 Priority axis 1, POSDRU/159/1.5/S/137390 contract. The activity resulted within the project has won four awards, two awards at the 23rd World Congress of Dermatology, 8-13 June 2015, Vancouver, Canada during the session FC03 - Dermoscopy and Skin Imaging (award from the organizers and award from International Leagues of Dermatology Societies ILDS) and two awards in the European project POSDRU (Award for exceeding the indicator of scientific researches obtained and Excellence Award). Regarding the study of adverse skin reactions at medicines, I have described for the first time in the specialty literature on the one hand, the induction of psoriatic arthropathy debut due to metoprolol and did a review on the action of selective / non-selective beta blockers on skin and joints and I have also written for the first in the specialty literature an adverse reaction of bullous type after etoricoxib intake and then doing a review on few known

adverse skin reactions of selective inhibitors of Cyclooxygenase 2 and also about the contact dermatitis induced by mometasone furoate. After graduating the doctorate, I continued to write books, of which two from the last didactic promotion. Moreover, since the latest didactic promotion I have been involved in three research projects in relation to the Lower Danube University: 1) Responsible with the project from the Lower Danube University Galati: 2013-2017: ISCH COST Action TD1206 Development and Implementation of European Standards on Prevention of Occupational Skin Diseases (StanDerm). Project COST (European competition). 2013-2015 Financing: COST Association and European Commission (104 mil. Euro); 2) national scientific research projects with third parties: 2) Project manager won in the competition - Project 689/26.09.2016 - Study on identifying the clinical, imaging, dermoscopy elements and skin microbiome in Rosacea and 3) Project manager won in the competition 690 / 28.09.2016 - Facial dermatitis induced by prolonged use of topical steroids - clinical, dermoscopy and parasitological aspects; source of origin, reasons for use, methods of treatment and ending corticosteroid addiction; also also Project Manager-Financing contract „Programul operational de competitivitate” NR.150/07.11.2016-P_34_499 with title „Infiintarea unui centru de cercetare pentru materiale avansate si membrane polimerice nanostructurate”, between 15.01.2017-30.11.2019. SC Grupul de Masuratori si Diagnoza SRL. Contract value as CIM nr 1/2017; also I have won the competition with my project to obtain a grant from the POSDRU project POSDRU/159/1.5/S/137390 contract I gained 14 years' experience of academic teaching in the field of Medicine-Dermatology – initially as associate professor on the position of University assistant, respectively Head of works between 2003-2010, then tenured professor as Head of works between 2011-2017. Practical works and course holder for the Discipline Dermatology, Venereology 2011-2017 Lower Danube University of Galati, Faculty of Medicine and Pharmacy for the following Specializations: Medicine, Pharmacy, Midwifery, Dentistry, Nursing. I am first author/coauthor of 161 papers, some presented as oral communications, posters at national or international congresses, symposia, workshops-98 papers, 63 of them published as abstracts (26) or in extenso published scientific papers (39), 14 of them in ISI indexed journals and I attended 78 congresses. I am a member of international Academies / Societies and Board Director / Vice President of the International Society of Dermatology. As development plans and career development I include three directions of scientific research: 1) Serum riboflavin, new strains of Bacillus / Rosacea 2) Dermato-Endocrinology 3) The study of skin reactions after taking medicines. On the academic level, the directions of teaching / practical applications and modes of action envisaged for implementation, will require to continuously improve the method of education, teaching and training in the field of Dermato-Venereology based on educational requirements and centered on the expectations and needs of knowledge in the field by students

and residents, PhD students. I will stimulate interactive debates, teamwork by drafting projects / articles presented publicly and I will coordinate scientific papers, graduate and doctoral papers. I want to set up a teledermatology group by smartphone, to start a postgraduate course of Training in Dermatoscopy for nondermatologists, to implement at the Lower Danube University the application UpToDateMobile Apps with access to 10500 topics evidence-based for 24 medical specialties, constantly updated by an editorial team of 6,300 doctors, world opinion leaders who monitor over 460 medical journals. I will organize one activity of continuing medical education per year with the support of the Lower Danube University and the Medical College in the Dermatology field. I will initiate a project to set up a treatment center with Excimer laser for Psoriasis, Vitiligo, Alopecia Areata, a project of financing the equipment for Coherent Optical Tomography, a multidisciplinary project. The results and experiences thus gained will be used for writing books, studies and articles that will be submitted for publication.