Editorial

20th Meeting of the French Society of Toxinology (SFET) Special Issue on "Toxins: from Threats to Benefits"

This Special Issue of *Toxicon* is published on the occasion of the "Rencontres en Toxinologie (RT)" meeting organized for the 20th anniversary of the French Society of Toxinology (SFET) and held at the Institut Pasteur in Paris on December 2012. About 120 participants (of which ca. 80 appear on the photo below), from Algeria, Belgium, Congo Republic, France, French Polynesia, Germany, Italy, Slovenia, Spain, Switzerland, Tunisia, and United States of America attended this meeting.

Fig. 1. Participants to the 20th meeting of the French Society of Toxinology (SFET) held in Paris, France (10-11 December, 2012)

The SFET was conceived during the 10th world Congress on Animal, Plant and Microbial toxins organised by the International Society of Toxinology (IST, Singapore, november 1991), and where the idea of an annual French meeting was proposed by Simone Puiseux-Dao. On December 1991, highly motivated French toxinologists joined together for a "happy hours" meeting in a pub in the St-Michel area in Paris, to debate on the pros and cons of creating their own national society. They were representatives of the major French laboratories involved in toxin research and affiliated to various institutions (CEA, CNRS, INSERM, MNHN, Institut Pasteur, and several Universities). They in no way wanted to bypass their friends of the European IST section, yet they were fully convinced that they should meet all together at least once a year, to not only strengthen collaborations and programs but also provide our students with an attractive opportunity to attend their first meeting and give their first oral communication... in French.

The SFET founding was decided during the 10th European Congress of Toxinology, held in Paris on September 1992. From a single day, all in French, in November 1993,

the annual SFET meeting became a must-not-miss, two days all in English “rendez-vous” for the French toxinologists and their foreign colleagues.

The SFET missions are: (1) to promote research in all domains concerning the venoms and toxins from animal, vegetal or microbial origins, *i.e.* the chemical, immunological, environmental, pharmacological, physiological domains, along with mode of action, structure-function relationships, drug-design and applicability questionings; (2) to favour the meeting of colleagues in the field, the communication to other scientists, education and training at all levels, and dissemination to more general audiences; (3) to improve the fundamental research on toxinology and enhance its applicability and applications.

We warmly thank all those who made this adventure possible, and more specially acknowledge the insightful contribution of our former Presidents, Simone Puiseux-Dao, Max Goyffon and Cassian Bon, who provided much time and efforts to make the SFET grow up and mature into a larger, dynamic, and renowned society, along with the contribution of our first secretary, Françoise Goudey-Perrière, who was very keen to publish and disseminate the proceedings of the SFET Rencontres, first as Special Issues of *Toxicon*, then as seven small “red books” published by Elsevier and the Librairie Lavoisier, and later on as four E-books published by the SFET itself. We also thank Alan Harvey, Editor-in-chief, who made publication of the RT20 proceedings as, again, a Special Issue of *Toxicon*.

This Special Issue gathers 17 original peer-reviewed articles and reviews, and 46 abstracts reflecting those works and data that were presented during the RT20 meeting in 2012. In the course of the two decades celebrated by the RT20 and this Special Issue, the number of toxins identified from microbial and animal sources increased dramatically and all aspects related to their biodiversity, synthesis, physiological effects and mode of action were studied intensively. As a result, we are now convinced that these toxins represent both a threat for humans, due to their natural toxicity or their use as biological weapons, and a vast source of potential benefit, associated with their use as pharmacological tools, imaging probes or therapeutic agents. In this context, the manuscripts in this Special Issue cover the various aspects related to toxins, ranging from the risks associated with their toxicity and from their genesis and evolution, to their mode of action related to molecular and cellular targets and to their exploitation for medical or paramedical purposes. We hope that this Special Issue of *Toxicon* will be an attractive comprehensive source of information not only for “toxinologists”, but also for all researchers and students interested by the fascinating two-faced “Janus” properties of toxins.

During the meeting, two prizes for the best poster presentations were awarded by a jury made up of invited speakers. The first prize was attributed to Géraldine Ferracci (right) for her study on “Protein chip technology for rapid and sensitive detection of botulinum neurotoxin activity”, and the second prize was awarded to Larissa Alvarenga (left) for her study “Design of recombinant antibody fragments to neutralize the dermonecrotic toxins of *Loxosceles intermedia*”. Congratulations again for the quality of their work.

Fig. 2. Géraldine Ferracci (right) and Larissa Alvarenga (left) awarded with the first and second prize of poster presentations.

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