

# Science Without Borders: Interview with Roger Melo (UFPe)

BY RICARDO BRAGA-NETO · JUNE 23, 2014

*PhD student in Biology of Fungi, Federal University of Pernambuco, Roger Melo is developing their study focused on taxonomy and ecology of fungi coprófilos. Part of his doctorate was held at the University of Illinois in the U.S. through the Science Without Borders program and he told a little of your experience abroad in the following interview.*



*Team of mycologists Robert A. Evers Laboratory, UIUC - from left to right: Andrew Miller, Lee Crane (Professor Emeritus), Yasmina Felix (visiting PhD student from Spain), Abe Matlak (graduate student), Roger Melo (visiting researcher Brazil), Vincent Hustad (PhD student), Huzefa Raja (visiting professor), Steve Zelski (PhD student), Jason Newton (graduate student), Tiffany Bone (Digitizer), Daniel Raudabaugh (graduate student) and David Adams (visiting researcher in Brazil).*

**1. Recently you had the opportunity to Science Without Borders program to undertake part of their study abroad. Where did you go and with whom he worked?**

During the six-month period from August 2013 to February 2014, the end of

the third year of my PhD, I worked at the University of Illinois, USA, under the mentoring of Professor [Andrew N . Miller](#) .

## **2. Which are the main activities that have been developed?**

fundamental steps of my work, as the identification / confirmation of 37 species of fungi collected in Brazil, with some of these new taxa to science, and many new records for the country, and taxonomic description Full 97 species, about 80% of the total presented in the work. Along with the written description, 800 photographs were obtained in high definition, using phase contrast microscopy and other appropriate resources for better results with my work material, allowing the assembly of photographic plates and improving the quality of the graphics obtained through these images. Access to literature through the "program *I-Share Libraries* "allowed the use and consultation of unavailable jobs at my home institution, contributing invaluable mode with the quality and scope of work.

## **3. What impact had the opportunity to develop your study?**

Opportunity to work abroad had great impact on the development of work, especially for access to literature and best quality microscopy, as well as the assistance of an expert teacher to questions that are frequent and usual in a doctoral thesis.

## **4. Indicate the positive aspects of the period spent abroad?**

Among the positives, highlight the unique life experience, and contact with people not only from the United States, but in different parts of the world, contributions from experienced researchers and distinct points of view of our reality, learning new techniques, improvement of language, among others.



*Workbench where the student can take the microscopic infrastructure to improve the results of his doctorate.*

**5. Was there any downside to this experience?**

High cost of American life and low valuation of our currency against the U.S. dollar has a bit more limited experience, but by no means limited job advancement.

**6. Which was the impact that the output of Brazil had to consolidate international partnerships?**

Whenever there visiting Brazilian students to foreign universities are created bridges between institutions. These bridges that can be the beginning of great partnerships. The Professor Miller as well as other University of Illinois (UIUC) has been in Brazil twice, once in Brasilia and Bahia, and two other Brazilian graduate students have been to Illinois at the same university, and my visit may have opened the opportunity for a future visit or even partnership between UIUC and the Federal University of Pernambuco (UFPe).

**7. Which the importance of free and open data in the network availability inct Virtual Herbarium Flora-and Fungi (INCT- HVFF )?**

species this data in Brazil are still scarce, and most of the references that Brazilian taxonomists use are still abroad. A database that provides this information is highly important for the Brazilian mycology.



**8. Which tools and applications available in-network inct HVFF were important to your work?**

Textual search deposited herbarium specimens have been of utmost importance for the development of my taxonomic revision in the Herbarium URM.

**9. You searched for any tools or data not found in inct-HVFF network?**

Many Searches in the Virtual Herbarium inct-Flora and Fungi network did not return any results, even when there was certainty that the species / materials in question had already been recorded in Brazil.

**10. The development of his work brought some feedback herbaria participants inct-HVFF network? What type of feedback and what herbaria?**

Two main types of feedback were (1) the significant and substantial addition to the collection of the Herbarium URM (important participant in the Virtual Herbarium inct-network Flora and Fungi), with the upper addition to 100 species not represented so far and (2) the review of 116 herbarium specimens of ascomycetes coprófilos Herbarium URM, nearing completion.

**11. Sometime geographical distribution model based on the ecological niche of the species was generated?**

Every species in the thesis have worked their geographical data based on their ecological niche generated.

**12. Did you have problems with the lack of geographical coordinates of specimens? Specimens without coordinates were old or new collections?**

Most of the species I work with are not available in the database, because it is a pioneering work. Soon, I had no problems with the lack of geographical coordinates.

**13. Do you have any suggestions for improving the functionality of inct-HVFF network?**

Making a deposit taxonomic information more accessible and images, and greater disclosure by the team responsible for all researchers to deposit information in the database, making the available data.

**14. Did you include or will include images of living and / or herbarium plants in the network?**

yet, but I'll add in a few months, possibly of all species. It would be great if there was the possibility of depositing boards mounted images, but as there is