2009 Research Days Abstract Form – Department of Ophthalmology – UNIFESP/EPM

2. SCIENTIFIC SECTION PREFERENCE (REQUIRED):

Review the Scientific Section Descriptions. Select and enter the two-letter Code for the one (1) Section best suited to review your abstract.

3. PRESENTATION PREFERENCE (REQUIRED) Check one:

X Paper
☐ Poster
☐ FAST Paper

4. The signature of the First (Presenting) Author (REQUIRED) acting as the authorized agent for all authors, hereby certifies that any research reported was conducted in compliance with the Declaration of Helsinki and the 'UNIFESP Ethical Committee"

Rafael Allan Oechsler____

Scientific Section Descriptions (two-letter code):

(BE) OCULAR BIOENGINEERING
(**CO) CORNEA AND EXTERNAL DISEASE**
(CA) CATARACT
(EF) ELECTROPHYSIOLOGY
(EP) EPIDEMIOLOGY
(EX) EXPERIMENTAL SURGERY
(GL) GLAUCOMA
(LA) LABORATORY
(LS) LACRIMAL SYSTEM
(LV) LOW VISION
(NO) NEURO-OPHTHALMOLOGY
(OR) ORBIT
(PL) OCULAR PLASTIC SURGERY
(PH) PHARMACOLOGY
(RE) RETINA AND VITREOUS
(RS) REFRACTIVE SURGERY
(RX) REFRACTION-CONTACT LENSES
(ST) STRABISMUS
(TR) TRAUMA
(TU) TUMORS AND PATHOLOGY
(UV) UVEITIS
(US) OCULAR ULTRASOUND

Deadline: Oct 12, 2009

FORMAT:
Abstract should contain:
Title
Author, Co-authors (maximum 6), Purpose, Methods, Results, Conclusion.

Poster guidelines:
ARVO Abstract Book (1.10 x 1.70m)

12. FIRST (PRESENTING) AUTHOR (REQUIRED):
Must be the author listed first in abstract body.

( ) R1 ( ) R2 ( ) R3 ( ) PIBIC
( ) PG0 (X) PG1 ( ) Fellow ( ) Technician

Last Name: Oechsler
First Name: Rafael
Middle: Allan

Service (Sector): Cornea and external disease

CEP Number:

Title: **DIFFERENCES IN CLINICAL OUTCOMES AND ANTIFUNGAL SUSCEPTIBILITIES AMONG MOLECULARLY IDENTIFIED *FUSARIUM SPECIES* FROM OCULAR SOURCES**

Author and Co-authors : Rafael Allan Oechsler, Ana Luisa Höfling-Lima, Juliana Sartori, Michael Robert Feilmeier, Darlene Miller, Eduardo Clement Alfonso

Purpose: To determine differences in the clinical characteristics and antifungal susceptibility patterns among molecularly characterized ocular *Fusarium sp* isolates. **Methods:** 58 *Fusarium* isolates obtained from ocular sources were retrieved from the Bascom Palmer Eye Institute's (BPEI) ocular microbiology laboratory and grown in pure culture. These isolates were genotyped based on the ITS 1 and 2 rDNA regions. Antifungal susceptibilities were determined for each isolate using broth microdilution methods and the corresponding medical records were reviewed to determine clinical outcomes. **Results:** *Fusarium (F.) solani* isolates were significantly more resistant to voriconazole compared to the *F. non-solani* isolates. *F. solani* isolates also exhibited a significantly longer time to cure, a worse follow up BCVA, and increased need for urgent surgical management when compared to *F. non-solani* isolates. **Conclusions:** This study supports the overall worse prognosis for *F. solani* versus *F. non-solani* isolates. The unique species-specific antifungal susceptibility and clinical outcome profiles support the need for more accurate classification systems capable of reliable and rapid identification of organisms to the species level. The clinical implementation of such classification systems may yield important prognostic and therapeutic information that could improve the management and decrease the morbidity of fungal ocular infections.

Keywords- Fusarium sp., keratitis, antifungals, clinical outcomes, genotyping.