

A REPORT ON SHORT TERM VISIT (14 days) TO UNIVERSITY OF PRETORIA
UNDER DST INDOAFRICA PROJECT (From 2-7-2016 to 16-7-2016)



Submitted by

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DST, INDO-AFRICA PROJECT

Approved by

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PRINCIPAL/PRINCIPAL INVESTIGATOR

JSS COLLEGE OF PHARMACY

(JSS University, Mysuru)

ROCKLANDS, OOTY-643001, Tamilnadu, India

Day I: 4/7/2016

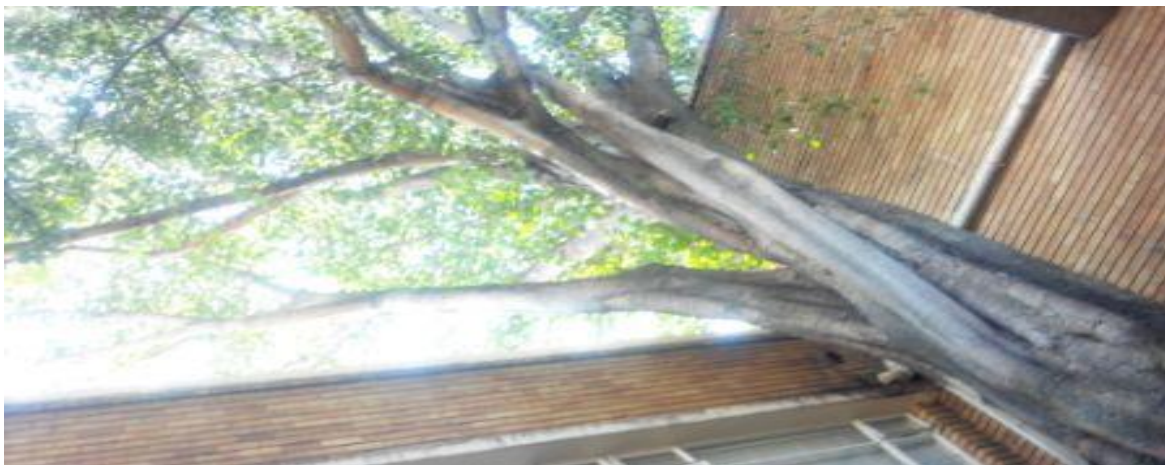
VISIT TO PLANT SCIENCES COMPLEX, UNIVERSITY OF PRETORIA, PRETORIA, SOUTH AFRICA

- ❖ We visited plant sciences complex through the assistance of Mss Isa Lamberts, Post graduate student.
- ❖ At 9 am we had an extensive interaction with Prof Namrita Lall and her research team regarding the progress of the research carried out at JSS College of Pharmacy, Ooty, India followed by breakfast.
- ❖ At 10.30 am, Prof Lall briefly explained about plant sciences complex and had introduction to each and every individual of her team followed by explanation of schedule of work and also Prof Lal requested to give a presentation to her team on 7/7/2016 regarding the type of research carrying out in JSSCP, Ooty at doctoral level.
- ❖ At 12 pm, we visited various labs in plant sciences complex and interacted with various scientists working there in each lab regarding the type of current natural product research work and the type of protocols they followed for various isolations and biological assays.
- ❖ At 1 pm , Interaction with Mr. Mathew and Ms Isa followed by lunch in the university canteen



Day II: 5/7/2016 Brief discussion on Antituberculosis assay by presto blue method and Field visit to botanical garden in University of Pretoria.

- ❖ At 9 am, The lab training session was started under the guidance of Prof Lal. A brief discussion on the protocol of Microtitre Alamar Blue Assay (Antituberculosis assay) with Mr. Carel and Mr Mathew. We learned the protocol and prepared samples for the next day assay.
- ❖ At 12 pm, we had interaction with Mr. carel followed by lunch regarding the various things around the campus and student life style in campus.
- ❖ At 1 pm, We had a field visit to botanical garden in university of Pretoria through the guidance of botanist Dr. Jason accompanied by Ms. Isa Lamberts. In this session we had good interaction with Dr. Jason on the various medicinal plants preserved in the campus and type of the herbarium documentation they followed. We observed some medicinal plants like *Laurus nobilis*, *Clivia nobilis*, *Tulbagia simmeillii*, *Marsilea schelpiana*, *Colcasia esculanta*, *Euamnis lallidiflora*, *Salvia species*, *Oxalis pescaprae* etc., where extensive research is going on these indigenous plants.



Day 3 – Day 5, 6-7-2016 to 8-7-2016: Lab training on Microtitre Alamar Blue assay

The lab training was started under the guidance of Mr. Carel, Research scholar of Plant sciences complex, we screened about 15 plant extracts against *Mycobacterium smegmatis* for three days. We learned in depth how to screen plant extracts for their antitubercular activity using this assay.



Day 6 & 7, 9-7-2016 to 10-7-2016: Local travel and site seeing to Maropeng (The cradle of Human Kind, Monte casino and Chameleon village

- ❖ We visited to the heritage site of globe Maropeng (The cradle of Human kind) and the monte casino, learned various customs and life styles of South Africa accompanied by Ms Isa Lamberts.
- ❖ On 10-7-2016, visited Chameleon village, learned the various tribal cultures and their traditional shopping malls accompanied by Ms Isa Lamberts.



Day 8, 11 -7-2016 Field visit and Interaction with Mr Lulama of Zulu traditional healer and university visit

We visited botanical gardens of Pretoria and observed the medicinal plant garden followed by the visit to traditional healer Mr. Lulama. We had nice interaction with the traditional healer and learned the traditional healing practices of South Africa accompanied by Ms. Isa Lamberts, Ms. Bianca and Mr. Marco.



Day 9, 12-7-2016, Invited Research talks at Plant sciences Complex on Doctoral research at JSSCP, Ooty.

- ❖ Mr. M.V.N.L.Chaitanya delivered a talk to plant sciences complex research team on his research topic Human dual topopoisons I & II from the weed of Niligiris, interacted, discussed and clarified various queries raised by the audience. All appreciated the type of research taking place at JSSCP,Ooty.



Day 10, 13-7-2016, Interaction with Dr Punkah, DST , South Africa and talk with Dr. Kritzinger

- ❖ At 11 am , we had a nice interaction with Dr. Punkah and Prof Lall , we conveyed our wishes from Dr. S.P.Dhanabal with a compliment from JSSCP, Ooty and Dr. Punkah conveyed her best wishes to Dr S.P.Dhanabal and his entire team.
- ❖ Followed by an interaction with Dr. Kritzinger ,Senior Lecturer and Scientist of Plant sciences complex, University of Pretoria. The interactive session started with the mutual ideas on the collaborative research.



DAY 11 & 12, 14 -7-2016 & 15-7-2016, ESTABLISHMENT OF TOTAL ANTIOXIDANT CAPACITY USING AMMONIUM MOLYBDATE ASSAY.

- ❖ Established the protocol for the total antioxidant assay using ammonium molybdate assay technique.



Conclusion:

This visit gave us an opportunity to learn antituberculosis assay techniques, various cultures of South Africa, Traditional healing of South Africa and to interact with great researchers of South Africa to learn and share mutual novel research developments. However this type of visit increases the mutual collaboration for a novel cause in future.

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