LRC STUDENTS

GRADUATED STUDENTS

Terrence Johan Moore
Post-Doctoral Research fellow
Title of Research Project: A Study to Evaluate the Effect of Low Level Laser Therapy (LLLT) on Dermal and Adipose Stem Cells.

Ahmed El Hussein
Post Doctoral Research Fellow
Title of Research Project: Assessment of DNA Damage after Photodynamic Therapy

Denise Hawkins Evans
Masters, Doctorate and Post-Doctoral Research Fellow in Biomedical Technology
Title of Dissertation: Screening of a SNO Genomic Library for HPV and p53 Gene Mutations
Title of Thesis: Biological Effects of Low Level Laser Therapy on Normal and Wounded Human Skin Fibroblasts – An In Vitro Study
Title of Research Project: Second Messengers and Phototherapy in Senescent Cells

Nicolette Houreld
Masters, Doctorate and Post-Doctoral Research Fellow in Biomedical Technology
Title of Dissertation: DNA Damage Assessment and Reactivation Tuberculosis in South African Gold Mineworkers and Radiographers
Title of Thesis: Effect of Low Level Laser Therapy on Cellular and Molecular Events in Diabetic Wound Healing – An In Vitro Study
Title of Research Project: Low-Energy Laser Irradiation on Cellular Redox Potential and Collagen Production
Bernard Mvula
Masters and Doctorate Student in Biomedical Technology
Title of Dissertation: Effect of Low Level Laser Irradiation on Human Adult Adipose Derived Stem Cells – an In Vitro Study
Title of Thesis: Differentiation Potential of ADSC’s in Co-Culture with SKUT-1 and the effect of Laser Irradiation

Palesa Sekhejane
Masters and Doctorate Student in Biomedical Technology
Title of Dissertation: Effect of Low Level Laser Irradiation on Expression of Cytokines and Growth Factors Involved in Wound Healing
Title of Thesis: Subcellular Localization of Zinc Sulphophthalocyanine and its Efficacy for Photodynamic Therapy in Colorectal Cancer Cell Lines (DLD-1 and CaCo-2)

Sello Manoto
Masters and Doctorate Student in Biomedical Technology
Title of Dissertation: The Effect of a Zinc Sulphophthalocyanine and Laser Irradiation (636nm) on a Lung Cancer Cell Line (A549)
Title of Thesis: Phototoxic Effects of Zn Sulphophthalocyanine on Lung Cancer Cells (A549) Grown as a Monolayer and Three Dimensional Multicellular Tumour Spheroids

Tamarisk Horne
Masters and Doctorate Student in Biochemistry
Title of Dissertation: Investigating the Effects of In Vitro Photodynamic Treatment with Two Metallophthalocyanine in MCF-7 Breast Cancer Cells.
Title of Thesis: Photodynamic therapy in human cancer cells

Tina Kresfelder
Doctorate Student in Biochemistry
Title of Thesis: Evaluation of the Cellular Effects of Two Metallophthalocyanine Compounds Activated During Photodynamic Therapy (PDT) on an Oesophageal Cancer Cell Line
Ivan Mfouo-Tynga
B.Tech and Masters Student (Cum Laude) in Biomedical Technology
Title of Research Project: Cellular Effects of Metallated Phthalocyanine and 5-ALA on Human Breast Cancer Cells (MCF-7) Using Low Level Laser Irradiation
Title of Dissertation: Effectiveness of Zinc Phthalocyanine and Hyericin in Inducing Cell Death in Human Breast Cancer cells (MCF-7) Using Low Intensity Laser Irradiation (LILI)

Sandra Ayuk
B.Tech and Masters Student (Cum Laude) in Biomedical Technology
Title of Research Project: Influence of Low Intensity Laser Irradiation on Nitric Oxide in Isolated Human Skin Fibroblasts
Title of Dissertation: Collagen Production in Wounded Human Skin Fibroblasts in Response to Low Intensity Laser Irradiation

Jennifer De Villiers
B.Tech and Masters Student in Biomedical Technology
Title of Research Project: The Effect of Low Level Laser Therapy on Wounded Cells That Have Been Exposed to Zearalenone
Title of Dissertation: Functionality of Adipose Derived Stem Cells Differentiated Smooth Muscle Cells Using Fluorescent Live Cell Imaging

Alwin Mbene
B.Tech and Masters Student in Biomedical Technology
Title of Research Project: Adaptive Response and DNA Damage in Diabetic Wounded Fibroblast Cells following laser Irradiation
Title of Dissertation: The Effects of Low Level Laser Therapy on Gene Activation, DNA Damage and Repair Using 5 or 16 J/cm² on Wounded Human Skin Fibroblast Cells

Innocent Zungu
B.Tech and Masters Student in Biomedical Technology
Title of Research Project: Adaptive Response and DNA Damage in Diabetic Wounded Fibroblast Cells following Laser Irradiation
Title of Dissertation: Mitochondrial Responses of Normal and Injured Human Skin Fibroblasts Following Low Level Laser Irradiation - An In Vitro Study
Nicole Yiannakis
Masters Student in Biochemistry
Title of Dissertation: The Effect of a Zinc Sulphophthalocyanine Used During Photodynamic Therapy on an Oesophageal Cancer Cell Line

Lindie Saayman
Masters student in Chiropractic
Title of Dissertation: The Effect of Chiropractic Manipulative Therapy and Low Level Laser Therapy on Cervical Facet Syndrome

Annelise Bresler
Masters student in Homeopathy
Title of Dissertation: The Effect of Calendula Officinalis 3cH and Low Level Laser Therapy on Wound Healing in Human Skin Fibroblasts In Vitro

Tebogo Mathope
Masters student in Biomedical Technology
Title of Dissertation: The Effect of Low Level Laser Radiation on the Differentiation of Human Adult Adipose Derived Stem Cells into Smooth Muscle Cells

Cherie Robertson
Masters student in Biotechnology
Title of Dissertation: The Effect of Photodynamic Therapy on Melanoma Cells
Fezile Khumalo
B.Tech and Masters Student in Biotechnology
Title of Research Project: The Effect of Laser Therapy on Wounded Deoxynivalenol Exposed Fibroblast Cells
Title of Dissertation: Investigation into Microfluidic Devices for Particle Separation

Roland Masha
Masters Student in Biomedical Technology
Title of Dissertation: Effect of Laser Irradiation on Enzyme Kinetics of Mitochondrial Respiratory Chain Complexes

Leezanne Nelson
B.Tech Student in Biomedical Technology
Title of Research Project: The Effect of Laser Therapy on Wounded and Non-Wounded Cells Exposed to the Mycotoxin, Fumonisin B1

Sefudi Sefalafala
B.Tech Student in Biotechnology
Title of Research Project: The Effect of Low Level Laser Therapy on Wounded Cells Exposed to the Mycotoxin, Aflatoxin B1

Marike Jansen Van Rensburg
Honours Student in Biochemistry
Title of Research Project: The Effect of Photosense and Laser Irradiation on Hsp70 Expression, Cell Viability and Proliferation of Lung Cancer Cells (A549)
Andreas Fusi
B.Tech Student in Biomedical Technology
Title of Research Project: Methods Used to Determine the Effect of PDT in Melanoma Cells

Collins Chilala
B.Tech Student in Biomedical Technology
Title of Research Project: Methods to Assess Mechanisms Involved in Laser Irradiated Wounded Fibroblast Cells

Stavroela Muller
B.Tech Student in Biomedical Technology
Title of Research Project: Effect of Different Fluencies of Low Level Laser Irradiation (LLLI) of Adipose Derived Stem Cells at a Wavelength of 680 nm

Leonard Nlovo
B.Tech Student in Biotechnology
Title of Research Project: Effect of low level laser irradiation on Adipose Derived Stem Cells (ADSCs) Using Different Fluencies at a Wavelength of 830 nm

Gustav Ololo
B.Tech Student in Biotechnology
Title of Research Project: Assessment of the Effectiveness of ZnPc Photosensitizer on a Colorectal Cell Line (Caco-2) Using Low Power Laser Irradiation
Lindiwe Dlamini
B.Tech Student in Biotechnology
Title of Research Project: The Isolation and Characterisation of Cancer Stem Cells (CSCs) From a Breast Cancer Cell Line (MCF-7) and the Effects of LILI on Viability and Proliferation

Anine Crous
B.Tech Student in Biomedical Technology
Title of Research Project: The isolation and Characterisation of Cancer Stem Cells From a Lung Cancer Cell Line (A549) and the Effects of LILI on Viability and Proliferation

Bahle Nteleki
B.Tech Student in Podiatry
Title of Research Project: The Use of Phototherapy and Podiatric Intervention to Manage Chronic Lower Limb Ulcerations in Patients with Type II Diabetes Mellitus: A Pilot Study

Raeesah Ismail
B.Tech Student in Biotechnology
Title of Research Project: Effect of Low Intensity Laser Irradiation at 680 nm on Cancer Cell Proliferation and DNA Methylation Status

Modishe Maila
B.Tech Student in Biotechnology
Title of Research Project: Effect of Low Intensity Laser Irradiation at 830 nm on Cancer Cell Proliferation and DNA Methylation Status
Lerato Moroena  
B.Tech Student in Biomedical Technology  
Title of Research Project: Effect of 660 nm on the JAK/STAT Signalling Pathway in Diabetic Wounded Fibroblast Cells

Patricia Kasowanjete  
B.Tech Student in Biomedical Technology  
Title of Research Project: Cellular Response (Physical/ Chemical Changes) of Colorectal Cancer Cells (Caco-2 Cells) Treated with Different Concentration of Hypericin and Aluminium Phthalocyanine

Abraham Banda  
B.Tech Student in Biomedical Technology  
Title of Research Project: The Role of Low Intensity Laser Irradiation on the Differentiation of Adipose Derived Stem Cells into Neural Cells

Thabisile Mabuza  
B.Tech Student in Biomedical Technology  
Title of Research Project: An in vitro study of phototoxicity of gold nanoparticle conjugated 5 ALA on human melanoma (A375) cancer cells

Tshepiso Masekoameng  
B.Tech Student in Biomedical Technology  
Title of Research Project: Effect of Gold Nanoparticle Conjugated Zinc Sulfophthalocyanine on Cell Proliferation and Viability of A549 Cancer Cells
CURRENT STUDENTS

Post-Doctoral Fellow

Dr. Hemmaragala M Nanjundaswamy
Project Title: Novel Biomolecule-Nanoparticle System: Synthesis, Properties, Cellular Interactions and Cytotoxicity Studies

Dr Blassan P. George
Project Title: A Comparative Study of Plant Extract and Photosensitizer (MPc) as a Chemotherapeutic Agent: A Novel Treatment Strategy

Dr Sathish Sundar Dhillip Kumar
Project Title: Selective Laser Efficiency of Green Synthesized Silver Nanoparticles by Aloe Arborescens and its Wound Healing Applications: In Vitro

Current Students – Doctorate

Ivan Mfouo-Tynga
Doctorate Student in Biomedical Technology
Title of Thesis: Combined effects of Zinc Phthalocyanine-Antibody-Gold Nanoparticle Conjugates and Low Intensity Laser Irradiation (LILI) in Human Breast and Lung Cancer Cells
Sandra Matabi Ayuk
Doctorate Student in Biomedical Technology
Title of Thesis: The Role of Low Intensity Laser Irradiation on Matrix Proteins and Gene Expression in Various Stressed Fibroblasts Cell Models

Ivy Ndhundhuma
Doctorate Student in Biomedical Technology
Title of Thesis: Photochemical Tumor Detection Modality for Skin Cancer

Francois Kabeya
Doctorate Student in Biomedical Technology
Title of Thesis: Modelling of laser treatment for coronary heart disease

Current Students – Masters

Anine Crous
Masters Student in Biomedical Technology
Title of Dissertation: The Effect of Low Intensity Laser Irradiation on Cancer Stem Cells Isolated from Lung Cancer
Sania Kadanyo  
Masters Student in Nanoscience  
Title of Dissertation: Synthesis and Characterisation of Copper Nanoparticles and its Photoactive Effect in Colorectal Cancer Cells

Khosi Mpofana  
Masters Student in Somatology  
Title of Dissertation: Effectiveness of Light Emitting Diode in the Treatment of Melasma on Skin Types V and VI

Nozipho Sithole  
Masters Student in Podiatry  
Title of Dissertation: Phototherapy and podiatric intervention for the management of chronic lower limb ulcerations in patients with type II Diabetes Mellitus and skin type III and V.

Nadia Dembskey  
Masters Student in Podiatry  
Title of Dissertation: The effectiveness of laser treatment for Onychomycosis

Ndvito Elodie Kiro  
Masters Student in Biomedical Technology  
Title of Dissertation: Impact of Low Intensity Laser Irradiation on Breast and Cervical Cancer Stem Cells
Current Students – Honours