CURRICULUM VITAE

Nour S. Erekat, PhD

Professor of Anatomy/ Neuroscience

Department of Anatomy

Faculty of Medicine

Jordan University of Science and Technology

B.O. Box: 3030

Irbid 22110, Jordan

Email: nserekat@just.edu.jo

Tel.: 962-2-7201000 ext. 23861

EDUCATION

Doctorate of Philosophy (PhD), Anatomy/ Neuroscience

Center for Anatomical Science and Education

Department of Surgery

School of Medicine

Saint Louis University

Saint Louis, MO 63104, USA

2006-2010

Master of Science (Direct transition into the PhD program), Anatomy

Center for Anatomical Science and Education

Department of Surgery

School of Medicine

Saint Louis University

Saint Louis, MO 63104, USA

2005-2006

Bachelor of Science in Dental Medicine and Surgery (BDS that is equivalent to DDS)

Faculty of Dentistry

Jordan University of Science and Technology

B.O. Box 3030, Irbid 22110, Jordan

1996-2001

(GPA: 83.2%)

High School Certificate, Scientific Division

Jordanian Ministry of Education

Jordan

1996

(Score: 96.7%)

PhD AREA OF RESEARCH

Mechanisms Underlying Cerebellar Purkinje Cell Death in the Shaker Mutant Rat.

This project included three research projects:

• The occurrence of apoptosis as a mode of cell death undertaken by cerebellar Purkinje neurons in the shaker mutant rat as an animal model of

cerebellar ataxia

• The appearance of morphological features of autophagy prior to those of

apoptosis ultrastructurally in the cerebellar Purkinje neurons consequent to

the shaker mutation

• The impact of inferior olive chemoablation and olivocerebellar

deafferentation in addition to the shaker mutation on the apoptotic cell

death of cerebellar Purkinje neurons

PROFESSIONAL EXPERIENCE

2020 -present Professor of Anatomy/Neuroscience

Department of Anatomy

Faculty of Medicine

Jordan University of Science and Technology

2015 -2020 Associate Professor of Anatomy/Neuroscience

Department of Anatomy

2

Faculty of Medicine

Jordan University of Science and Technology

2010 -2015 Assistant Professor of Anatomy/Neuroscience

Department of Anatomy

Faculty of Medicine

Jordan University of Science and Technology

2006-2010 Teaching Assistant

Center for Anatomical Science and Education

School of Medicine
Saint Louis University

2004-2005 Research and Teaching Assistant

Department of Anatomy

Faculty of Medicine

Jordan University of Science and Technology

2002-2004 Dentist

Private clinic

Jordan

2002 Jordanian Ministry of Health License for Practicing Dental

Profession

2001-2002 Internship

Ministry of Health

Jordan

<u>ADMINISTRATIVE EXPERIENCE</u>

• Chairman of the Department of Anatomy (2021-2023)

Faculty of Medicine

Jordan University of Science and Technology

- Committee of Plastinated cadaver tender in 2023
- Committee of 3D anatomy software tender in 2023
- Faculty Promotion Committee for several faculty members
- Committee of student issues in the Faculty of Medicine (2023-2024)
- Committee of Research in the Department of Anatomy (2010-present)
- Graduate studies committee in the Department of Anatomy (2010-present)
- Faculty Committee of Research in the Faculty of Medicine (2021-2022)
- Faculty Committee of Research in the Faculty of Medicine (2023-2024)
- Graduate studies committee in the Faculty of Medicine (2021-2022)
- Graduate studies committee in the Faculty of Medicine (2022-2023)
- Committee of curriculum developing and study plan for doctor in medicine (2021-2022)
- Committee of curriculum developing and study plan for doctor in medicine (2022-2023)
- Course Equivalency Committee in the Faculty of Medicine (2021-2022)
- Course Equivalency Committee in the Faculty of Medicine (2022-2023)
- Committee for Exam monitoring and reviewing in the Faculty of Medicine (2021-2022)
- Committee for Exam monitoring and reviewing in the Faculty of Medicine (2022-2023)
- Appointment and promotion committee in the Faculty of Medicine (2021-2022)
- Appointment and promotion committee in the Faculty of Medicine (2022-2023)

FELLOWSHIPS AND GRANTS

- Four-year scholarship, Jordan University of Science and Technology, 2005.
- Travel grant to attend the 39th annual meeting of the Society for Neuroscience, Neuroscience 2009, Chicago, awarded by the Center for Anatomical Science and Education, Department of Surgery, School of Medicine, Saint Louis University, MO 63104, U.S.A.

HONORS AND AWARDS

- Venus International Foundation Outstanding Woman Researcher Award in Neuroscience 2024
 - https://viwa.info/2024/hm-ms-neuro.html
- Alpha, Epsilon, Lambda Award
 - Recognition as a member of Chi Chapter of Alpha, Epsilon, Lambda at Saint Louis University for excellence in service to graduate and professional school students through outstanding scholarship, character, and leadership
- Golden Key International Honor Society
 - o Validated by Saint Louis University
- Jordan University of Science and Technology
 - o Deanship honor list- 1996/1997
- The National Scholars Honor Society

AREAS OF INTEREST AND EXPERTISE

- Types of cell death in neurodegenerative diseases
- Molecular alterations subsequent to the induction of chronic Parkinsonism
- Cerebellar neurodegeneration in harmaline-induced essential tremor

PROFESSIONAL MEMBERSHIPS

- Society for Neuroscience
- American Association for Anatomy
- American Association for Advancement of Science
- International Association for Parkinsonism and Related Disorders

EDITORIAL BOARD MEMBERSHIP

1. Frontiers in Cell and Developmental Biology

Cell Death and Survival section ISSN: 2296-634X (Electronic)

Lausanne: Frontiers Media S.A., Switzerland https://loop.frontiersin.org/people/891016/editorial

https://www.frontiersin.org/journals/cell-and-developmental-biology/editors

2. Clinical Pathology

eISSN: 2632010X | ISSN: 2632010X

SAGE Publications, 2455 Teller Road, Thousand Oaks, CA 91320

https://us.sagepub.com/en-us/nam/clinical-pathology/journal203646#editorial-board

JOURNAL REVIEWER PANEL MEMBERSHIP

1. Frontiers in Aging Neuroscience

E-ISSN: 1663-4365

Lausanne: Frontiers Research Foundation, Avenue du Tribunal Fédéral 34

CH – 1005 Lausanne, Switzerland

https://www.frontiersin.org/articles/10.3389/fnagi.2024.1340117/full

2. Frontiers in Physiology

E-ISSN: 1664-042X

Lausanne: Frontiers Research Foundation, Avenue du Tribunal Fédéral 34

CH – 1005 Lausanne, Switzerland

http://www.frontiersin.org/physiology/archive

3. Medical Science Monitor. Impact factor is 1.98

ISSN: 1643-3750. E-ISSN: 1643-3750.

INT SCIENTIFIC INFORMATION, INC, 150 BROADHOLLOW RD, STE 114,

MELVILLE, USA, NY, 11747.

https://www.medscimonit.com/reviewers/index/year/2019/letter/E

ACADEMIC SUPERVISION AND THESIS COMMITTEES (MASTER STUDENTS)

Single Advisor for the following Master students:

- 1. Rawan A. Rabab'ah, 2014.
- 2. Iman F. Shilbayeh, 2016.
- 3. Leenah H. Gharaybeh, 2017.
- 4. Mai I. Iraqi, 2017.

<u>Principal Advisor</u> for the following Master students:

- 5. Shatha Saleem, 2022.
- 6. Areen A. Al-Jarah, 2016.

Co-Advisor for the following Master students:

7. Soheir M. Al-Mansi, 2015.

RESEARCH GRANTS RECEIVED

<u>Principal Investigator</u> in the following research grants:

- 1. Alterations in the Expression of Nitric Oxide Synthase in the Skeletal Muscle from a Mouse Model of Chronic/ Progressive Parkinson Disease. 2012.
- 2. Mechanisms Underlying Cardiomyopathy in the MPTP/probencid Mouse Model of Chronic Parkinson Disease with and without Exercise Training. 2013.
- 3. Molecular Alterations in Fast- and Slow-Twitch Skeletal Muscles Subsequent to the Induction of Parkinson Disease and Exercise Training. 2014.
- 4. Molecular alterations in renal cell death in rats with induced diabetes mellitus following exercise. 2014.
- Impact of Parkinson Disease Induction on the Expression of Myostatin and Myogenic Regulatory Proteins in Fast- and Slow- Twitch Skeletal Muscles. 2015.
- 6. Harmaline-induced alterations in the cerebellar expression of inflammatory mediators. 2015.
- 7. Molecular alterations in the hepatic expression of inflammatory cytokines subsequent to the administration of methyl methacrylate in rats. 2016.
- 8. Impact of the toxicity of methyl methacrylate on the hepatic expression of heat shock proteins in the rat. 2016.
- 9. Comparison of methyl methacrylate toxicity-induced alterations in the hepatic expression between interleukin 30 and interleukin 10. 2016.
- 10. Comparison of the changes in the expression between interleukin 12 and interleukin 6 in the liver subsequent to the administration of methyl methacrylate. 2016.
- 11. Impact of endurance exercise training on the expression of myogenic regulatory proteins in skeletal muscles from a mouse model of chronic/progressive Parkinson disease. 2017.

<u>Co-Investigator</u> in the following research grants:

12. Evaluation of the toxic effect of heat-cured Methyl methacrylate on rats. 2015.

NON-DEGREE COURSES (WORKSHOPS)

- Introduction to Clinical Research Training (ICRT) Program
 Harvard Medical School Postgraduate Medical Education

 6-month Certificate Program (March 7 September 21, 2020)
 4 Blackfan Circle
 Boston, MA 02115
- Testing and Evaluation "University Examinations" (training course), Academic Development and Quality Assurance Center. JUST. 2011.
- Modern University Instructional Methods "electronic learning" (training course), Academic Development and Quality Assurance Center, JUST. 2011.
- Statistical Analysis using SPSS (training course): Academic Development and Quality Assurance Center. JUST. 2011.
- Managing Research Grants (training course): Academic Development and Quality Assurance Center. JUST. 2011.
- Teaching Methods and Strategies (training course): Academic Development and Quality Assurance Center. JUST. 2017.
- Statistical Data Analysis Using R Software (training course): Academic Development and Quality Assurance Center. JUST. 2017.
- Development of Curriculum & Study plans (training course): Academic Development and Quality Assurance Center. JUST. 2017.

• Taylor & Francis Research workshop. JUST. 2017.

PUBLISHED BOOK CHAPTERS:

Apoptosis and its Role in Parkinson's Disease.

Nour S. Erekat

Editors: Stoker TB, Greenland JC. (From John Van Geest Centre for Brain

Repair, Department of Clinical Neurosciences, University of Cambridge, UK).

Chapter 4.

Book: Parkinson's Disease: Pathogenesis and Clinical Aspects.

Publisher: Codon Publications- Brisbane, Australia.

PMID: 30702843. 2018 Dec 21.

https://www.ncbi.nlm.nih.gov/pubmed/30702843

https://codonpublications.com/index.php/codon

DOI: 10.15586/codonpublications.parkinsonsdisease.2018.ch4

PUBLICATIONS

 Nour S. Erekat. "Autophagy and Its Association with Genetic Mutations in Parkinson Disease". Medical Science Monitor. 2022 Nov 11;28:e938519. PMID: 36366737. Review.

doi: 10.12659/MSM.938519.

 Nour S. Erekat. "Programmed Cell Death in Diabetic Nephropathy: A Review of Apoptosis, Autophagy, and Necroptosis." Medical Science Monitor. 2022 Aug 22;28:e937766. PMID: 35989481. Review.

doi: 10.12659/MSM.937766.

• **Nour S. Erekat.** "Programmed cell death in cerebellar Purkinje neurons". Journal of Integrative Neuroscience 2022 Jan;21(1):30. PMID: 35164466. Review.

doi: 10.31083/j.jin2101030.

- Nour S. Erekat. "Apoptosis and its therapeutic implications in neurodegenerative diseases". Clinal Anatomy 2022 Jan;35(1):65-78.
 doi: 10.1002/ca.23792. Epub 2021 Oct 7. PMID: 34558138 Review.
- **Nour S. Erekat.** "Active caspase-3 upregulation is augmented in at-risk cerebellar Purkinje cells following inferior olive chemoablation in the shaker mutant rat: an immunofluorescence study". Neurological Research 2019 Mar;41(3):234-241. doi: 10.1080/01616412.2018.1548792. Epub 2018 Nov 21. PMID: 30462592.
- Nour S. Erekat. "Cerebellar Upregulation of Cell Surface Death Receptor-Mediated Apoptotic Factors in Harmaline-Induced Tremor: An Immunohistochemistry Stud"y. Journal of Cell Death. 2018 Nov 5;11:1179066018809091. doi: 10.1177/1179066018809091. eCollection 2018. PMID: 30450003.
- Nour S. Erekat. "Apoptosis and its Role in Parkinson's Disease".
 In: Stoker TB1, Greenland JC1, editors. Parkinson's Disease: Pathogenesis and Clinical Aspects [Internet]. Brisbane (AU): Codon Publications; 2018 Dec. Chapter 4.
- Nour S. Erekat. "Autophagy precedes apotosis among at risk cerebellar Purkinje cells in the shaker mutant rat: an ultrastructural study". Ultrastructural pathology. 2018 Mar-Apr;42(2):162-169. doi: 10.1080/01913123.2018.1424744. Epub 2018 Feb 8. PMID: 29419349.
- Nour S. Erekat, Muhammed D. Al-Jarrah. "Endurance exercise training suppresses myostatin upregulation and nuclear factor-kappa B activation in a mouse model of Parkinson's disease". Veterinary World 2022;15(2): 383-389. doi: www.doi.org/10.14202/vetworld.2022.383-389
- Nour S. Erekat, Muhammed D. Al-Jarrah. "Endurance exercise training suppresses myostatin upregulation and nuclear factor-kappa B activation in a

mouse model of Parkinson's disease." Veterinary World. 2022 Feb;15(2):383-389.

PMID: 35400955.

doi: 10.14202/vetworld.2022.383-389.

Muhammed D. Al-Jarrah, Nour S. Erekat. "Treadmill exercise training could attenuate the upregulation of Interleukin-1β and tumor necrosis factor alpha in the skeletal muscle of mouse model of chronic/progressive Parkinson disease".
 NeuroRehabilitation. 2018;43(4):501-507. doi: 10.3233/NRE-182492. PMID: 30400118.

- Nour Erekat, Muhammed D. Al-Jarrah. "Interleukin-1 Beta and Tumor Necrosis
 Factor Alpha Upregulation and Nuclear Factor Kappa B Activation in Skeletal
 Muscle from a Mouse Model of Chronic/Progressive Parkinson Disease". Medical
 Science Monitor 2019 Mar;41(3):234-241. doi: 10.1080/01616412.2018.1548792.
 Epub 2018 Nov 21. PMID: 30462592.
- Nour S. Erekat, Muhammed D. Al-Jarrah. "Association of Parkinson disease induction with cardiac upregulation of apoptotic mediators P53 and Active caspase-3: An immunohistochemistry study". Medical Science Monitor Basic Research. 2018 Aug 23;24:120-126. doi: 10.12659/MSMBR.910307.
 PMID: 30135418.
- Nour S. Erekat, Rawan A. Rababa'h, Muhammed D. Al-Jarrah. "Overexpression of renal proapoptotic factors is attenuated subsequent to endurance exercise in Type I diabetes: An immunohistochemistry study". The Journal of Natural Science, Biology and Medicine. January 2019; 10(1):24-28.
 DOI: 10.4103/jnsbm.JNSBM 60 18.
- Nour S. Erekat, Areen A. Al-Jarrah, Ali M. Shotar, Zeid A. Al-Hourani.
 "Hepatic Upregulation of Tumor Necrosis Factor Alpha and Activation of Nuclear Factor Kappa B Following Methyl Methacrylate Administration in the Rat".
 International Journal of Pharmacology. 2018; 14 (6): 889-895.
- Al-Jarrah MD, Nour S. Erekat "Endurance exercise training suppresses
 Parkinson disease-induced overexpression of apoptotic mediators in the heart".

NeuroRehabilitation 2021 Mar.

doi: 10.3233/NRE-201650. Online ahead of print. PMID: 33814475

- Zeid A. Al-Hourani, Nour S. Erekat, Suheir M. Al- Mansi. "Heat-cured methyl methacrylate induces increased expression of HSP70 and iNOS in the liver". Int J Toxicol Pharmacol Res. 2017; 9: 93-98.
- Muhammed D. Al-Jarrah, Nour S. Erekat. "Parkinson disease-induced upregulation of apoptotic mediators could be attenuated in the skeletal muscle following chronic exercise training". Neurorehabilitation. 2017;41(4):823-830. doi: 10.3233/NRE-172196. PMID: 29254117.
- Nour S. Erekat. "Cerebellar Purkinje Cells Die by Apoptosis in the Shaker Mutant Rat". Brain Research 2017 Feb 15;1657:323-332. doi: 10.1016/j.brainres.2016.12.025. Epub 2016 Dec 28. PMID: 28040459.
- Nour S. Erekat. "Apoptotic mediators are upregulated in the skeletal muscle of chronic/progressive mouse model of Parkinson's disease". Anatomical Record (Hoboken). 2015 Aug;298(8):1472-8. doi: 10.1002/ar.23124. Epub 2015 Mar 27. PMID: 25704481.
- **Nour Erekat**, Ahed Al Khatib, Muhammed Al-Jarrah. "Heat shock protein 90 is a potential therapeutic target for ameliorating skeletal muscle abnormalities in Parkinson's disease ". Neural Regeneration Research. 2014 Mar 15;9(6):616-21. doi: 10.4103/1673-5374.130105. PMID: 25206864.
- Nour S. Erekat, Muhammed D. Al-Jarrah, Ahed J. Al Khatib. "Treadmill exercise training improves vascular endothelial growth factor expression in the cardiac muscle of type I diabetic rats". Cardiology Research. 2014 Feb;5(1):23-29. doi: 10.14740/cr314w. Epub 2014 Feb 27. PMID: 28392871.
- Muhammed Al-Jarrah, Nour Erekat, Ahed Al Khatib. "Upregulation of Vascular Endothelial Growth Factor Expression in the Kidney Could Be Reversed

Following Treadmill Exercise Training in Type I Diabetic Rats". World Journal of Nephrology and Urology. 2014; 3(1): 25-29.

Nour Erekat, Ahed Al Khatib, Muhammed Al-Jarrah. "Endurance Exercise
Training Attenuates the up Regulation of iNOS in the Skeletal Muscles of
Chronic/Progressive Mouse Model of Parkinson's Disease". Journal of
Neurology Research. 2013;3(3-4):108-113.

POSTER PRESENTATION, CONFERENCES AND NEWSLETTERS

- N.S. Erekat, D.L. Tolbert. "Mechanisms Underlying Cerebellar Purkinje Cell Death in the Shaker Mutant Rat". Neuroscience 2009, the 39th annual meeting of the Society for Neuroscience, Chicago.
- "Quick Highlight: Apoptosis in Mouse Model of Parkinson's Disease". American Association of Anatomists Newsletter, 2015. https://www.anatomy.org/quick-highlight-apoptosis-in-mouse-model-of-parkinsonrsquos-disease.html.

TEACHING EXPERIENCE

Course coordinator for the following courses:

Med713	Neuroanatomy for MSc Students
Med711	Embryology for MSc Students
Med710	Advanced anatomy and cell biology for MSc Students
Med115	Anatomy and embryology, 1st year medical students
Med114	Histology and Cell biology, 1st year medical students
Med713	Neuroanatomy for MSc Students
Med 332	Neuroscience II, 3 rd year medical students
Med252	Respiratory System Module, 2 nd year medical students
Med321	Endocrine System Module, 3 rd year medical students

Med217A	Head and Neck Anatomy for dental students
Med217B	Practical Head and Neck Anatomy for dental students
Med 216	General Histology for Dental Students
Med226	Neuroscience for applied medical students
Med130	Anatomy for Nursing Students
Med130A	Anatomy and embryology for Midwives
Med219A	Head and Neck Anatomy for applied medical students
Med219B	Practical Head and Neck Anatomy for applied medical students
Med218	Gross Anatomy and Histology for applied medical students

Teaching the following courses:

Med713	Neuroanatomy for MSc Students
Med711	Embryology for MSc Students
Med710	Advanced anatomy and cell biology for MSc Students
Med322	Neuroscience 1 module, 3 rd year medical students
Med332	Neuroscience 2 module, 3 rd year medical students
Med115	Anatomy and embryology, 1st year medical students
Med114	Histology and Cell biology, 1st year medical students
Med282	Neuroscience System module, 2 nd year medical students
Med331	Musculoskeletal and Integumentary System Module, 3 rd year medical
	students
Med272	Haemopoietic and Lymphatic System Module, 2 nd year medical
	students
Med352	Urinary and Reproductive System Module, 3 rd year medical students
Med364	Cardiovascular System Module, 23 rd year medical students
Med252	Respiratory System Module, 2 nd year medical students
Med 216	General Histology for Dental Students
Med217A	Head and Neck Anatomy for dental students
Med226	Neuroscience 1 for applied medical students
Med217B	Practical Head and Neck Anatomy for dental students
Med210A	Anatomy and histology for pharmacy students
Med210B	Practical Anatomy and histology for pharmacy students
Med218	Anatomy for applied medical sciences students

Med219A	Head and Neck Anatomy for applied medical students
Med219B	Practical Head and Neck Anatomy for applied medical students
Med130A	Anatomy and Embryology for Midwives
Med130	Anatomy for nursing students
Med710	Advanced Anatomy and Cell Biology for MSc Students

COMPUTER KNOWLEDGE

- Neurolucida: The Most Advanced System for Neuron Tracing and Reconstruction,
 Neuron Analysis and 3D Brain Mapping
- Microsoft Office
- SPSS statistical package
- EndNote
- Reference Manager
- Adobe Photoshop
- Image J
- Internet Applications

REFERENCES

• Available upon request.



SAINT LOUIS UNIVERSITY 1402 South Grand Blvd. St. Louis, MO 63104-1028 Phone: 314-977-8035 Fax: 314-977-5127 www.slu.edu

Center for Anatomical Science and Education Office of the Director

School of Medicine Health Sciences Center

August 5, 2010

To Whom It May Concern:

Nour Erekat was a full-time graduate student at the Center of Anatomical Science and Education for 5 continuous years from 2005 through 2010. In August of 2005 Nour was enrolled in the Master's in Anatomy program in the Center for Anatomical Science and Education, Department of Surgery at Saint Louis University School of Medicine. In May 2006, after her first academic year, Nour's academic performance was so strong that the Faculty of Anatomy voted unanimously to transition her directly into the PhD in Anatomy program. The twenty two course work credit hours and three research credit hours she completed in her first year transferred to the PhD in Anatomy program. Therefore, the Master's program was included in the PhD program. Nour was required to take an additional twenty six course work credit hours and nine research credit hours to meet the total of forty eight course work credit hours and twelve research credit hours required for a PhD degree in Anatomy. Additionally, Nour passed both the written and oral doctoral qualifying exams. She subsequently submitted her dissertation findings to the Faculty of Anatomy in May of 2010. In mid-July of 2010 the final copy of her dissertation was approved by the members of her dissertation committee and submitted to the Graduate School. This was the final requirement for being awarded the PhD degree in Anatomy. Upon acceptance of the dissertation by the Graduate School the PhD in Anatomy degree was conferred on July 29, 2010.

Sincerely,

Daniel Tolbert, PhD.



SAINT LOUIS UNIVERSITY 1402 South Grand Blvd. St. Louis, MO 63104-1028 Phone: 314-977-8035 Fax: 314-977-5127 www.slu.edu

Center for Anatomical Science and Education Office of the Director

School of Medicine Health Sciences Center

August 4, 2010

Dr. Rashid Al-Jomard Chair, Department of Anatomy Jordan University of Science and Technology

Dear Dr. Al-Jomard:

Graduate students in our doctoral program in Anatomy receive extensive training in teaching human structure and function. This training is overseen by the faculty as a group and each student receives individualized mentoring by their advisor. I served as Dr. Nour Erekat's research and teaching advisor while she was a student in our program. Each year students make a formal seminar or journal club presentation to the faculty and students in CASE. Each presentation is evaluated by the faculty and assigned a numerical score. Dr. Erekat consistently received high marks for her oral presentation, the appropriate organization of the material presented and how she answered questions asked by faculty and peers. Dr. Erekat also lectured in our Introduction to Human Anatomy course taught to allied health students. Her lectures were organized and appropriate for the level of students in the class. Dr. Erekat also "assisted" as a doctoral fellow in courses taught to medical and graduate students. In medical Human Anatomy and Neurosciences she received high accolades for her dedicated work with the students in the laboratory. She received similar high scores from the graduate students where she not only assisted in the lab, but also lectured.

In summary Dr. Erekat taught in 5 anatomy courses.

Down L. Taller, Pro

Sincerely,

Daniel L. Tolbert, Ph.D. Professor and Director

Planta Tipsilon Nambd Be it known that Nour Trekat has received recognition as a Member of Chi Chapter of Alpha Epsilon Lambda at St. Louis University for excellence in service to graduate and professional school students through outstanding scholarship, character, and leadership presented this sixteenth day of April, 2008.

Golden Key International Honour Society

This Certifies Chat Nour S. Erekat

Is a member of the Golden Key International Honour Society as validated by

Saint Louis University

and is hereby granted all Honors, Benefits and Privileges pertaining to membership in the Society, effective

November 10, 2008



Ciclia A. manique