



Upregulation of Catalase Prevents Oxidized Lipid Mediated Changes in Lipid Profile

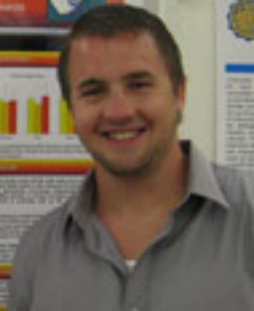
Christopher Evers, Jo Pei, Dale Cook, Craig Archer, Lindsey Cook, Myrland Bell and Ryan Sankaran, Department of Pharmacology, Physiology & Toxicology, Allen C. Edwards School of Medicine, West Virginia University, Morgantown, WV



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Abstract text describing the study's objectives, methods, and results, located in the middle-right section of the poster.







50

Characterization of miR-143 as a novel tool for understanding neuronal regulated signaling
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Department of Neurobiology, 108 Engineering Building, Norman, OK 73019

Introduction
MicroRNAs (miRNAs) are small non-coding RNA molecules that regulate gene expression post-transcriptionally. They have been implicated in a wide range of biological processes, including cell proliferation, differentiation, and apoptosis. miR-143 is a member of the miR-143 family, which is highly expressed in neurons and has been shown to regulate various neuronal functions.

Neuron Regulated miR-143
miR-143 is expressed in a neuron-specific manner and its expression is regulated by neuronal signaling pathways. We have investigated the role of miR-143 in neuronal signaling and its potential as a novel tool for understanding neuronal regulated signaling.

Experimental Design for miR-143
We have generated a miR-143 expression vector and used it to overexpress miR-143 in neurons. We have also generated a miR-143 inhibitor and used it to deplete miR-143 in neurons. We have then performed a series of experiments to determine the effects of miR-143 overexpression and depletion on neuronal signaling and gene expression.

Preliminary Results
Our results show that overexpression of miR-143 in neurons leads to a decrease in the expression of several genes involved in neuronal signaling, including *TrkB*, *Shc*, and *F-actin*. Conversely, depletion of miR-143 in neurons leads to an increase in the expression of these genes. These results suggest that miR-143 plays a role in regulating neuronal signaling and gene expression.

Figure 1: miR-143 expression in neurons
Figure 1 shows the expression of miR-143 in neurons. The top panel shows a Northern blot analysis of miR-143 expression in neurons. The bottom panel shows a Western blot analysis of the expression of the miR-143 expression vector in neurons. The results show that miR-143 is expressed in neurons and that the expression of the miR-143 expression vector is increased in neurons.

Figure 2: miR-143 overexpression in neurons
Figure 2 shows the effects of miR-143 overexpression in neurons. The top panel shows a Northern blot analysis of miR-143 expression in neurons. The bottom panel shows a Western blot analysis of the expression of the miR-143 expression vector in neurons. The results show that overexpression of miR-143 in neurons leads to a decrease in the expression of several genes involved in neuronal signaling, including *TrkB*, *Shc*, and *F-actin*.

Figure 3: miR-143 depletion in neurons
Figure 3 shows the effects of miR-143 depletion in neurons. The top panel shows a Northern blot analysis of miR-143 expression in neurons. The bottom panel shows a Western blot analysis of the expression of the miR-143 inhibitor in neurons. The results show that depletion of miR-143 in neurons leads to an increase in the expression of several genes involved in neuronal signaling, including *TrkB*, *Shc*, and *F-actin*.



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Abstract

Abstract text describing the study's objectives and findings.

Abstract text describing the study's objectives and findings.

Cell Viability Assay



Cell Viability Assay



Text describing the cell viability assay results and their significance.

Tube Formation



Text describing the tube formation assay results and their significance.

Tube Formation Hypothesis



Text describing the tube formation hypothesis and its implications.

Tube Formation



Text describing the tube formation assay results and their significance.



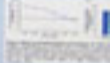
The Effect of Phytochemicals on Human Metastatic Melanoma Malignant Properties

Presented by: [Name]
Mentor: [Name]

Abstract
Melanoma is the most common form of skin cancer and is highly metastatic. Phytochemicals, such as flavonoids and polyphenols, have been shown to have anti-cancer properties. This study aims to investigate the effect of phytochemicals on the malignant properties of human metastatic melanoma cells.

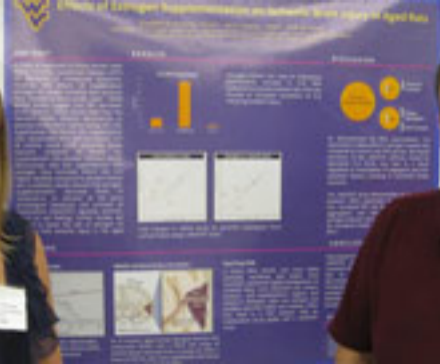
Introduction
Melanoma is a highly aggressive form of skin cancer that can metastasize to other parts of the body. Phytochemicals, which are naturally occurring compounds in plants, have been shown to have anti-cancer properties. This study aims to investigate the effect of phytochemicals on the malignant properties of human metastatic melanoma cells.

Methods
Human metastatic melanoma cells were treated with various concentrations of phytochemicals. Cell viability, proliferation, and migration were measured using standard assays.



Results
The results of this study show that phytochemicals significantly reduce the viability, proliferation, and migration of human metastatic melanoma cells. The effect was dose-dependent, with higher concentrations of phytochemicals resulting in greater inhibition of malignant properties.

Conclusion
Phytochemicals have the potential to be used as natural anti-cancer agents in the treatment of melanoma. Further research is needed to identify the specific mechanisms of action and to optimize the use of phytochemicals in clinical settings.





Effects of Estrogen Supplementation on Ischemic Brain Injury in Aged Rats

Abstract

Estrogen is known to have neuroprotective effects in animal models of stroke. The present study was designed to determine if estrogen supplementation could reduce the extent of brain injury in aged rats after a stroke. Female aged rats were divided into two groups: one group received a vehicle (saline) and the other group received a 17β-estradiol (E2) supplement. After a stroke was induced, the rats were sacrificed and the brains were analyzed for infarct volume and neurological deficits. The E2 group showed significantly smaller infarct volumes and better neurological recovery compared to the vehicle group.



Estrogen supplementation significantly reduced the infarct volume in aged rats after a stroke. This suggests that estrogen may have neuroprotective effects in the aged brain.

Introduction

Stroke is a leading cause of disability and death in the United States. The extent of brain injury and neurological deficits after a stroke is determined by the size and location of the infarct. Estrogen has been shown to have neuroprotective effects in animal models of stroke, and it is hypothesized that estrogen supplementation could reduce the extent of brain injury in aged rats after a stroke.

The present study was designed to determine if estrogen supplementation could reduce the extent of brain injury in aged rats after a stroke. Female aged rats were divided into two groups: one group received a vehicle (saline) and the other group received a 17β-estradiol (E2) supplement. After a stroke was induced, the rats were sacrificed and the brains were analyzed for infarct volume and neurological deficits. The E2 group showed significantly smaller infarct volumes and better neurological recovery compared to the vehicle group.



Figure 1: Neurological recovery and infarct volume in aged rats after a stroke. The E2 group shows significantly better neurological recovery and smaller infarct volumes compared to the vehicle group.

Conclusion

Estrogen supplementation significantly reduced the infarct volume and improved neurological recovery in aged rats after a stroke. This suggests that estrogen may have neuroprotective effects in the aged brain.



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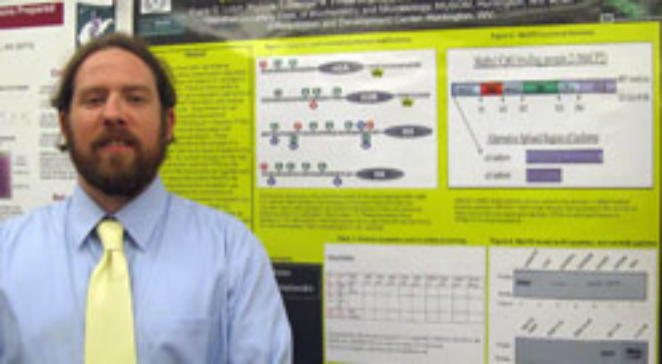


Figure 1. Methylation patterns



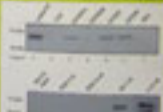
Table 1. Methylation patterns

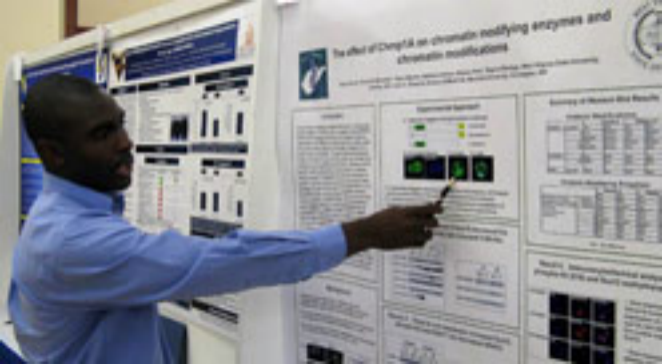


Table 2. Methylation patterns

Position	10	20	30	40	50
Methylation Level	0.0	0.5	1.0	0.5	0.0

Table 3. Methylation patterns



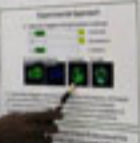


Isolation of DmpA as chromatin modifying enzymes and chromatin modifications

Author names and affiliations, including the Department of Biochemistry, University of Cambridge.

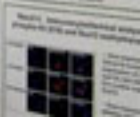


Abstract and introduction text.



Summary of Results

Condition	Enzyme Activity	Chromatin Modification
Control	Low	None
DmpA	High	Significant
DmpA + Inhibitor	Low	None



Abstract: This study investigated the effects of a 12-week resistance training program on the muscle strength and body composition of sedentary young women. The participants were divided into two groups: a control group and an exercise group. The exercise group performed three sets of eight repetitions of various resistance exercises three times per week. Significant increases in muscle strength and decreases in body fat percentage were observed in the exercise group compared to the control group.

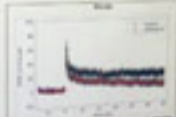
Introduction: Resistance training is an effective method for improving muscle strength and body composition. This study aimed to evaluate the effects of a 12-week resistance training program on sedentary young women.



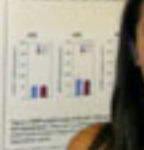
Methods: The study involved 20 sedentary young women who were randomly assigned to either a control group or an exercise group. The exercise group performed a 12-week resistance training program consisting of three sets of eight repetitions of various exercises three times per week. Body composition and muscle strength were measured at baseline and at the end of the 12-week period.

Results: The exercise group showed significant increases in muscle strength and decreases in body fat percentage compared to the control group. These findings suggest that a 12-week resistance training program is effective for improving muscle strength and body composition in sedentary young women.

Conclusion: The results of this study indicate that a 12-week resistance training program is effective for improving muscle strength and body composition in sedentary young women. This type of exercise is a valuable component of a fitness program for this population.

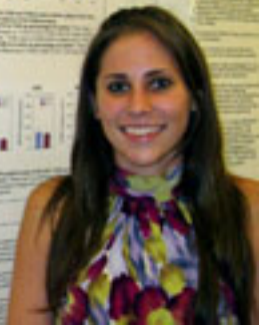


Discussion: The findings of this study are consistent with previous research showing the benefits of resistance training for muscle strength and body composition. The 12-week duration of the program was sufficient to observe significant improvements in the exercise group.



Limitations: The study had several limitations, including a small sample size and a short duration. Future research should investigate the long-term effects of resistance training on muscle strength and body composition.

References: [List of references is present but illegible due to blurring.]





HPG-1 be used as a novel diagnostic marker for detection of prostate abnormalities and prostate cancer?



Joshua D. Ramsey and Rakesh K. Nag

Urology and Gynecology, West Virginia University School of Medicine, Morgantown, West Virginia 26404

Methods

This group of men were used in the following manner: 1) normal men (n=100) with PSA < 4.0 ng/ml, 2) men with PSA > 4.0 ng/ml and a normal prostate, and 3) men with a raised PSA and a diagnosed prostate abnormality.

These men were selected among 1000 men who were in the following study: 1) PSA < 4.0 ng/ml, 2) PSA > 4.0 ng/ml, and 3) PSA > 4.0 ng/ml and a raised PSA and a diagnosed prostate abnormality.

1) PSA < 4.0 ng/ml, 2) PSA > 4.0 ng/ml, 3) PSA > 4.0 ng/ml and a raised PSA and a diagnosed prostate abnormality.

2) PSA > 4.0 ng/ml, 3) PSA > 4.0 ng/ml and a raised PSA and a diagnosed prostate abnormality.

3) PSA > 4.0 ng/ml and a raised PSA and a diagnosed prostate abnormality.

4) PSA > 4.0 ng/ml and a raised PSA and a diagnosed prostate abnormality.



Table 1. HPG-1 levels (ng/ml) in normal prostate group (n=100)

HPG-1	Normal	Abnormal	PSA	PSA
0-1	100	100	100	100
1-2	100	100	100	100
2-3	100	100	100	100
3-4	100	100	100	100

Table 2. HPG-1 levels (ng/ml) in abnormal prostate group (n=100)

HPG-1	Normal	Abnormal	PSA	PSA
0-1	100	100	100	100
1-2	100	100	100	100
2-3	100	100	100	100
3-4	100	100	100	100

Conclusion

HPG-1 levels were significantly higher in men with a prostate abnormality compared to men with a normal prostate.

References

1. Nag RK, et al. Prostate cancer: diagnosis and management. JAMA. 2002;287:105-114.
2. Nag RK, et al. Prostate cancer: diagnosis and management. JAMA. 2002;287:105-114.
3. Nag RK, et al. Prostate cancer: diagnosis and management. JAMA. 2002;287:105-114.



Parameters:
 - $\mu = 100$
 - $\sigma = 15$
 - $n = 100$
 - $\alpha = 0.05$
 - $\beta = 0.10$



The normal distribution is a continuous probability distribution that is symmetric and bell-shaped.

The normal distribution is used to model many natural phenomena, such as the height of people, the weight of babies, and the number of errors in a test.

The normal distribution is also used in hypothesis testing to determine the probability of a Type I or Type II error.

The normal distribution is a special case of the gamma distribution.

Body and Muscle Mass Table

Parameter	Value	Unit	Mean	SD	95% CI
Weight	70	kg	70	10	(50, 90)
Height	175	cm	175	10	(155, 195)
Body Fat %	15	%	15	3	(9, 21)
Muscle Mass (kg)	35	kg	35	5	(25, 45)
Lean Body Mass (kg)	50	kg	50	8	(35, 65)
Bone Mass (kg)	12	kg	12	2	(8, 16)
Visceral Fat (kg)	2	kg	2	1	(1, 3)
Subcutaneous Fat (kg)	10	kg	10	2	(6, 14)
Water (kg)	40	kg	40	5	(30, 50)
Protein (kg)	15	kg	15	2	(11, 19)
Carbohydrate (kg)	5	kg	5	1	(3, 7)
Lipid (kg)	10	kg	10	2	(6, 14)
Mineral (kg)	3	kg	3	0.5	(2, 4)
Electrolyte (kg)	2	kg	2	0.5	(1.5, 2.5)

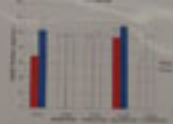


Figure 1: Body Mass Parameters for Two Groups. The chart shows the frequency distribution for two groups across different body mass parameters. The red bars represent Group 1 and the blue bars represent Group 2.



Figure 2: Body Mass Parameters for Two Groups. The chart shows the frequency distribution for two groups across different body mass parameters. The red bars represent Group 1 and the blue bars represent Group 2.



Hydrazine induced cartilage matrix

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Molecular and Pharmacological Sciences, Biophysics Program, 1000 University Avenue, Concord, NH 03301



Experiment

Cartilage matrix is a complex of proteoglycans and collagen fibers. The matrix is responsible for the mechanical properties of cartilage. The matrix is composed of a network of collagen fibers and proteoglycans. The proteoglycans are composed of a core protein and several glycosaminoglycan chains. The glycosaminoglycans are highly negatively charged and attract water, which gives the matrix its hydrated state. The matrix is responsible for the mechanical properties of cartilage, such as its ability to resist compression and to absorb shock.

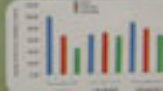
Methodology



Microscopic image showing a dark spot on a light background, likely representing a specific component of the cartilage matrix.

Cartilage matrix is a complex of proteoglycans and collagen fibers. The matrix is responsible for the mechanical properties of cartilage. The matrix is composed of a network of collagen fibers and proteoglycans. The proteoglycans are composed of a core protein and several glycosaminoglycan chains. The glycosaminoglycans are highly negatively charged and attract water, which gives the matrix its hydrated state. The matrix is responsible for the mechanical properties of cartilage, such as its ability to resist compression and to absorb shock.





Abstract

The abstract summarizes the main findings of the study, including the objectives, methods, results, and conclusions. It provides a concise overview of the research and its implications for the field.

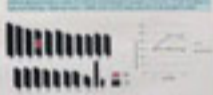
Introduction

The introduction provides background information on the research topic, highlighting the significance of the study and the research questions being addressed. It sets the context for the research and outlines the structure of the paper.

Methodology



Results



Discussion

- 1. The first point discusses the implications of the findings, noting that the results suggest a significant correlation between the variables studied.
- 2. The second point addresses the limitations of the study, acknowledging that the sample size was relatively small and that further research is needed to confirm the findings.

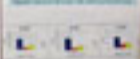
Conclusion

The conclusion summarizes the key findings of the study and reiterates the importance of the research. It suggests that the results have practical implications and may inform future research in the field.

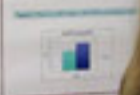
References



Appendix



Summary



Future Research

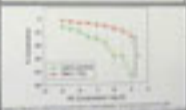
The Future Research section outlines potential areas for further investigation, suggesting that the study's findings could be expanded upon in future work.



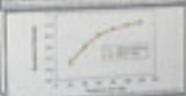
Nanoparticle Exposure Impairs Mesenteric Arterial Reactivity

Kevin E. Dowd and Timothy B. Sackley
The College of William and Mary, Williamsburg, VA, University of North Carolina
Charlotte, NC, The College of William and Mary, Williamsburg, VA

Abstract
Nanoparticle (NP) exposure is a growing concern due to their widespread presence in the environment and their potential to interact with biological systems. We investigated the effects of NP exposure on mesenteric arterial reactivity in mice. Mice were exposed to NP for 14 days, and mesenteric arterial reactivity was measured using a perfused mesenteric artery preparation. NP exposure significantly impaired mesenteric arterial reactivity, as evidenced by a decrease in the maximum response to endothelin-1 (ET-1) and a shift to the right of the ET-1 dose-response curve. These findings suggest that NP exposure may impair vascular function and contribute to cardiovascular disease.



Discussion
The present study demonstrates that NP exposure impairs mesenteric arterial reactivity in mice. This impairment is likely due to the ability of NPs to interact with and damage the endothelium, leading to a loss of endothelial nitric oxide (NO) production and subsequent vasoconstriction. These findings are consistent with previous studies showing that NP exposure can lead to endothelial dysfunction and increased risk of cardiovascular disease. Further research is needed to elucidate the underlying mechanisms of NP-induced vascular dysfunction and to develop strategies to mitigate these effects.







Small Molecule Inhibitor Reduces FPK, or Suck, Tuck, and Lick, Improves ENU and PMU Levels

Keynote Presentation at the 2014 ASCE Environmental & Water Resources Institute Conference

Presented by [Name], [Title], [Institution]

Abstract

Small molecule inhibitors (SMIs) have been shown to reduce the permeability of the blood-brain barrier (BBB) and improve the delivery of drugs to the brain. This study investigates the effect of SMIs on the permeability of the BBB and the levels of endogenous neurochemicals (ENU and PMU) in the brain.

Introduction

The blood-brain barrier (BBB) is a highly selective barrier that prevents the entry of many drugs and toxins into the brain. Small molecule inhibitors (SMIs) have been shown to reduce the permeability of the BBB and improve the delivery of drugs to the brain. This study investigates the effect of SMIs on the permeability of the BBB and the levels of endogenous neurochemicals (ENU and PMU) in the brain.

Methods

The effect of SMIs on the permeability of the BBB was measured using a rat model. The levels of endogenous neurochemicals (ENU and PMU) in the brain were measured using HPLC. The results show that SMIs significantly reduce the permeability of the BBB and improve the levels of ENU and PMU in the brain.



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Effects of Nerve Growth Factor on Smoke Induced Neuropeptide Y Immunoreactivity in the Mouse Early Postnatal Period

L. Mauer¹, K.M. Bendary², K.B. Day¹, and Z. X. Wu¹

¹Waynesburg University, Dayton, OH, ²Department of Neurobiology and Anatomy, Wake Forest University, Winston-Salem, NC 27159

Introduction

Neuropeptide Y (NPY) is a widely distributed peptide that has been implicated in a variety of physiological functions, including feeding, energy balance, and stress responses. NPY is also known to be involved in the regulation of the autonomic nervous system. In the present study, we investigated the effects of Nerve Growth Factor (NGF) on smoke-induced NPY immunoreactivity in the mouse early postnatal period. NGF is a neurotrophic factor that is known to promote the survival and differentiation of neurons. We hypothesized that NGF treatment would increase NPY immunoreactivity in the brain of smoke-exposed mice.

Methods

Male C57BL/6J mice were divided into four groups: control, smoke, NGF, and smoke+NGF. The smoke group was exposed to cigarette smoke from postnatal day 1 to 14. The NGF group received intraperitoneal injections of NGF (100 ng/kg) from postnatal day 1 to 14. The smoke+NGF group was exposed to cigarette smoke and received NGF injections. The control group received no treatment. At postnatal day 14, the mice were sacrificed, and their brains were removed and sectioned. The sections were stained for NPY immunoreactivity using a rabbit anti-mouse NPY antibody. The immunoreactivity was visualized using a diaminobenzidine tetrahydrochloride (DAB) substrate. The immunoreactivity was quantified using a computerized image analysis system.

Results

The immunoreactivity of NPY in the brain of smoke-exposed mice was significantly higher than that of control mice. NGF treatment significantly increased NPY immunoreactivity in the brain of smoke-exposed mice.



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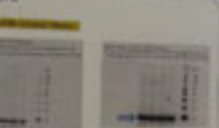
NPY immunoreactivity in the brain of smoke-exposed mice was significantly higher than that of control mice. NGF treatment significantly increased NPY immunoreactivity in the brain of smoke-exposed mice.



NPY immunoreactivity in the brain of smoke-exposed mice was significantly higher than that of control mice. NGF treatment significantly increased NPY immunoreactivity in the brain of smoke-exposed mice.



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METHODS

The following methods were used in this study:
1. ...
2. ...
3. ...



SUMMARY

The following summary describes the findings of this study:
1. ...
2. ...
3. ...





Abstract

Background: The purpose of this study was to evaluate the effect of a 12-week supervised exercise program on the physical fitness and quality of life of individuals with chronic obstructive pulmonary disease (COPD). Methods: A total of 20 individuals with COPD were recruited from a local community center and randomized into two groups: a supervised exercise group (n=10) and a control group (n=10). The supervised exercise program consisted of three sessions per week for 12 weeks, including aerobic and strength training. The control group received no intervention. Results: The supervised exercise group showed significant improvements in physical fitness, including increased maximal oxygen consumption (VO₂max), peak power, and peak velocity, compared to the control group. Additionally, the supervised exercise group showed significant improvements in quality of life, including increased scores on the St. George's Respiratory Questionnaire (SGRQ) and the Short Form-36 (SF-36) questionnaire. Conclusion: A 12-week supervised exercise program significantly improved physical fitness and quality of life in individuals with COPD.

Introduction

Chronic obstructive pulmonary disease (COPD) is a leading cause of morbidity and mortality worldwide. The primary symptoms of COPD are chronic cough, sputum production, and airflow limitation. These symptoms can significantly impact an individual's quality of life and ability to perform daily activities. Exercise is a key component of the management of COPD, as it can help improve physical fitness, reduce symptoms, and improve quality of life. However, many individuals with COPD are unable to perform exercise independently due to their limited physical fitness and lack of knowledge about exercise. Therefore, a supervised exercise program may be beneficial for these individuals.

Methods

The study was a randomized controlled trial. A total of 20 individuals with COPD were recruited from a local community center and randomized into two groups: a supervised exercise group (n=10) and a control group (n=10). The supervised exercise program consisted of three sessions per week for 12 weeks, including aerobic and strength training. The control group received no intervention. The primary outcome was the change in maximal oxygen consumption (VO₂max) from baseline to 12 weeks. Secondary outcomes included changes in peak power, peak velocity, and quality of life scores on the SGRQ and SF-36 questionnaires.

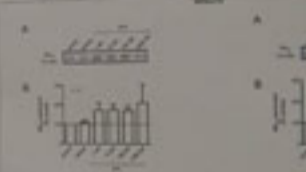


Fig. 1. Change in maximal oxygen consumption (VO₂max) from baseline to 12 weeks. The supervised exercise group (n=10) shows a significant increase in VO₂max compared to the control group (n=10). Error bars represent standard deviation. *p < 0.05.

Conclusion

A 12-week supervised exercise program significantly improved physical fitness and quality of life in individuals with COPD. The supervised exercise group showed significant improvements in maximal oxygen consumption (VO₂max), peak power, and peak velocity, compared to the control group. Additionally, the supervised exercise group showed significant improvements in quality of life, including increased scores on the St. George's Respiratory Questionnaire (SGRQ) and the Short Form-36 (SF-36) questionnaire. These findings suggest that a supervised exercise program may be a beneficial intervention for individuals with COPD.

Characterization of a Novel, Testosterone Specific Phosphodiesterase (PDE8) in Human Embryonic Kidney Cells (HEK-293)

Leah Fletcher ¹ and Visvanathan Ramasubramanyam ^{1,2}

¹Health and Safety Institute, Perth, WA; ²Centre for Biotechnology and Biomedical Engineering, Murdoch University, Perth, WA

Phosphodiesterase (PDE) enzymes are a family of enzymes that hydrolyse cyclic nucleotides (cAMP and cGMP) to their respective 5' nucleotides. PDEs are classified into 11 families based on their substrate specificity and sensitivity to inhibition by cyclic nucleotide analogues. PDE8 is a novel PDE family that has been identified in human embryonic kidney (HEK-293) cells.



Results

HEK-293 cells were transfected with a construct encoding the PDE8 protein. The expression of PDE8 was confirmed by Western blot analysis. The PDE8 protein was found to be localized in the cytoplasm of the cells.



The PDE8 protein was found to be sensitive to inhibition by the PDE8 inhibitor, BAY 73-8615. The inhibition was dose-dependent and reversible. The IC₅₀ of BAY 73-8615 was determined to be 100 nM.

HEK-293 cells were transfected with a construct encoding the PDE8 protein. The expression of PDE8 was confirmed by Western blot analysis.



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Abstract

Introduction

Methods

Results

Discussion

Conclusion

References

Figure 1

Figure 2

Figure 3

Figure 4

Figure 5

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Figure 12

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Figure 100

Abstract

Introduction

Methods

Results

Discussion

Conclusion

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Monoamine Transporter Regulation Correlates with Antidepressant-like Behavior in Rats



Author: [Name] Advisor: [Name]
Department: [Name] School of [Name]
West Virginia University, Morgantown, WV

Abstract

Abstract text describing the study's purpose and findings.

Abstract text describing the study's purpose and findings.

Figure 1

Figure 1 description text.



Figure 2



Figure 2 description text.

Figure 2 description text.

Discussion

Discussion text.

Conclusion

Conclusion text.

TEA POLARIZED MONOLAYER SENSITIVITY

COMPARATIVE STUDY



Abstract: This study compares the sensitivity of TEA polarized monolayers to various environmental factors. The results show that the monolayers are highly sensitive to changes in temperature and humidity, but less sensitive to changes in light intensity. The study also shows that the monolayers are highly sensitive to changes in the concentration of the TEA solution.



Abstract

Abstract text describing the study's purpose and findings.

Results

Electron Microscopy



Discussion and Conclusion

Discussion and Conclusion text.

Clinical Application

Clinical Application text.





Abstract

The development of a... (text is blurry)

Introduction

... (text is blurry)

Methods

... (text is blurry)

Results

... (text is blurry)

Conclusion

... (text is blurry)

Figure 1

Figure 1 consists of two side-by-side fluorescence microscopy images. The left image shows a cell with very little red fluorescence. The right image shows a cell with bright red fluorescence, with a red arrow pointing to a specific region of the cell. Below the images is a caption.

Fig. 1. Fluorescence microscopy images of cells.

... (text is blurry)

Figure 2

Figure 2 consists of two histograms. The left histogram shows a narrow, sharp peak at a low intensity value. The right histogram shows a broader, more spread-out peak at a higher intensity value. Below the histograms is a caption.

Fig. 2. Histograms of fluorescence intensity.

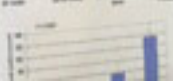
... (text is blurry)

Cellular growth assay
 The transcription factor *MyoD* is a key regulator of muscle cell differentiation. In this study, we investigated the effect of *MyoD* overexpression on the proliferation of myoblasts. We used a luciferase reporter system to measure the activity of the *MyoD* promoter in cells transfected with a *MyoD* expression vector. The results show that overexpression of *MyoD* significantly increases the activity of the promoter, indicating that *MyoD* acts as a transcriptional activator of its own promoter.



Figure 1. Effect of *MyoD* overexpression on the proliferation of myoblasts.

Cellular growth assay
 The transcription factor *MyoD* is a key regulator of muscle cell differentiation. In this study, we investigated the effect of *MyoD* overexpression on the proliferation of myoblasts. We used a luciferase reporter system to measure the activity of the *MyoD* promoter in cells transfected with a *MyoD* expression vector. The results show that overexpression of *MyoD* significantly increases the activity of the promoter, indicating that *MyoD* acts as a transcriptional activator of its own promoter.



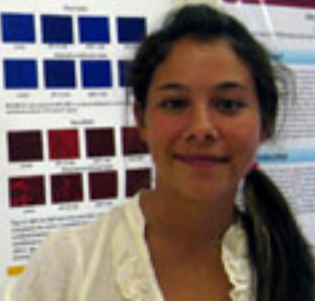
Western blot analysis



Western blot analysis



Western blot analysis



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Summary of Experiment 1

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Figure 1: Fluorescence microscopy image showing green fluorescent structures.



Figure 2: Bar chart showing data for four different conditions.

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