

論文研究與寫作實務

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醫學研究部 幹細胞中心

Writing is easy

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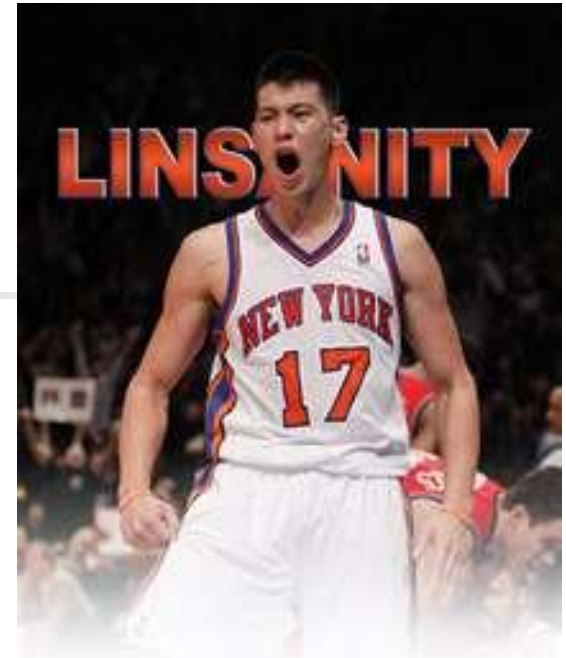
NBA Knickshow

Play Hard

Play Smart

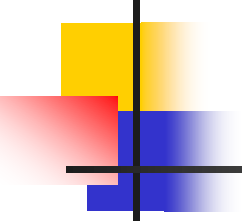
Play Together

Have Fun



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Puzzle Writing



- Easier
- Better
- Faster
- More valuable



Why am I qualified?

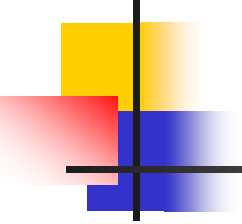
- 144 papers (1989-2012)
- 4 review articles
- 3 book chapters
- 1 patent
- Review 100+/year
- **Proposals/Manuscripts**
- Technical writing/Experimental design courses



Publication & Progress

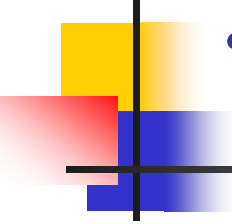
- Academic Pressure?
 - MS, PhD students
 - Faculty for promotion in institution
 - Obligation on research in institution
- Achievement??
- Enjoyment???





Time to write a paper?

- has a significant advancement been made?
- is the hypothesis straight forward?
- can you describe the study in 1 or 2 minutes?
- can the key message be written in 1 or 2 sentences?



Title: **What's your point?**

- Describe: **Succinct** and **reflect** study contents
- Raise: the **interest** toward the paper
- Think: **many** people read the title, **few** read the abstract, **very few** people read the paper
- Read: some "**titles** of the Journal"



Journal of Psychology

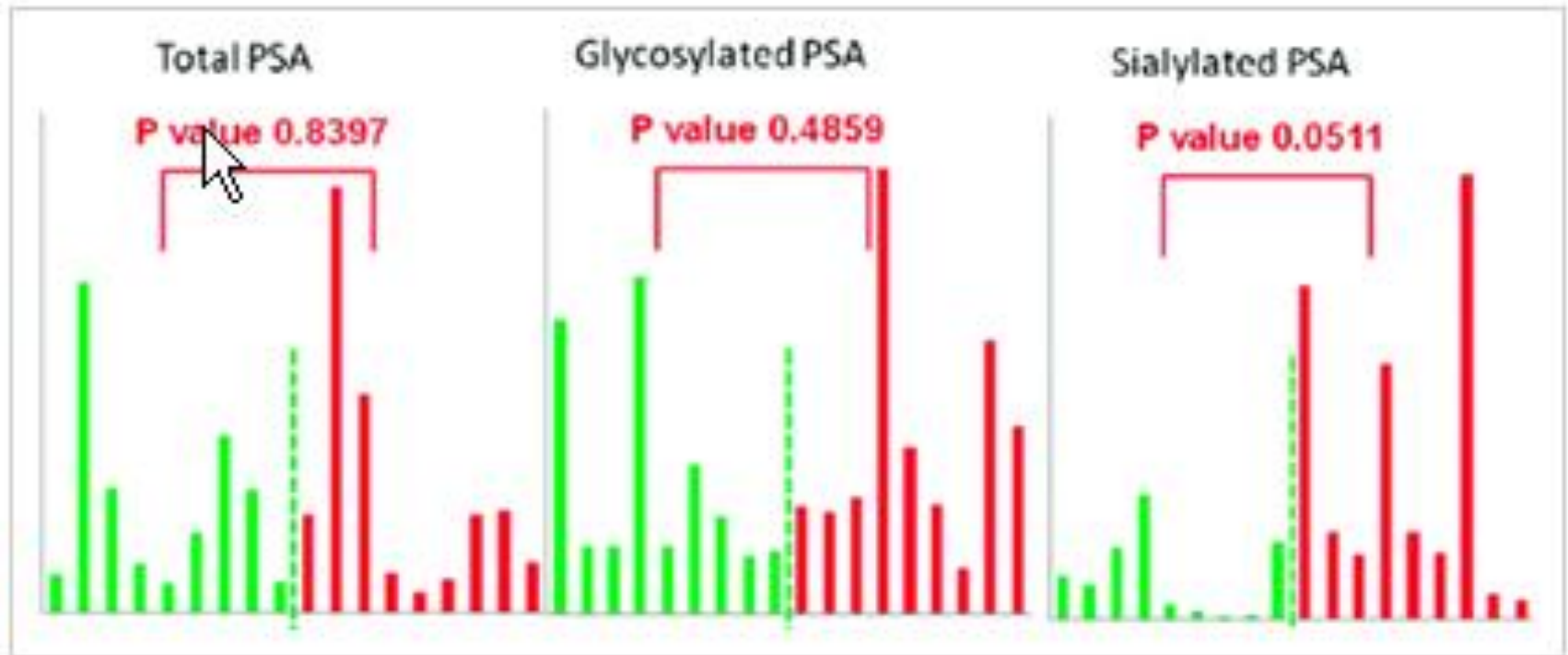
- Should IQ, perceptual speed, or both be used to explain response time?
- The role of height in the sex difference in intelligence
- In the Wrong Places? Or With the Wrong People?

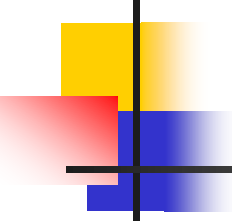


Study and Investigation?

- Interaction of Ceramics with Surface
- Interaction of Silicone Nitride with Metal Surface
- Interaction of Silicone Nitride with Stainless Steel Surface
- Chemical Bonding of Silicone Nitride with Stainless Steel Surface

Simultaneous Analysis of Glycosylated and Sialylated Prostate-Specific Antigen Revealing Differential Distribution of Glycosylated Prostate-Specific Antigen Isoforms in Prostate Cancer Tissues





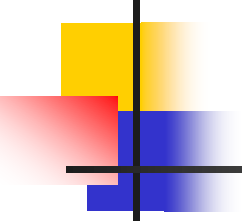
Abstract

Introduction
(1) (2) (3) (4)

Methods

Results

Discussion
(1) (2) (3) (4)
Conclusion



Results to be Presented

- The **core** of the paper
- Often includes tables, figures, and the text should overlap with that in the tables and figures
- Should present results **but not comment on them**



Introduction

Results

Methods

Discussion



Results Section

- Maintain a balance between **brevity** and **completeness**
- Describe experimental design including treatments measured, how many **replicates**, **controls** etc
- Present the results in an **orderly sequence**



Results

- Overview of results
- Viewing results
- Key results in detail
- Problems with results



Results Section

- If your research has been concerned with a **new question** or has used a **new** approach to an old question, most of your evidence will be your **own observations and data**. This **new evidence** is what should be reported in the Results section.
- The Results section should give **as clear an answer** to the **question** to be answered by the research as your data will permit.
- Present the **key results**, in orderly sequence, **without** interpreting their meaning.



Figures: A Few Suggestions

- Use figures (graphs, diagrams, maps, photographs, etc) only if they will help **convey your information**.
- **Avoid** including **too much** information in **one figure**.
- Make sure any lettering will be large enough once published.
- Follow the **Journal's instructions**.

Incidence of hospitalization due to child maltreatment in Taiwan, 1996-2007: A nationwide population-based study

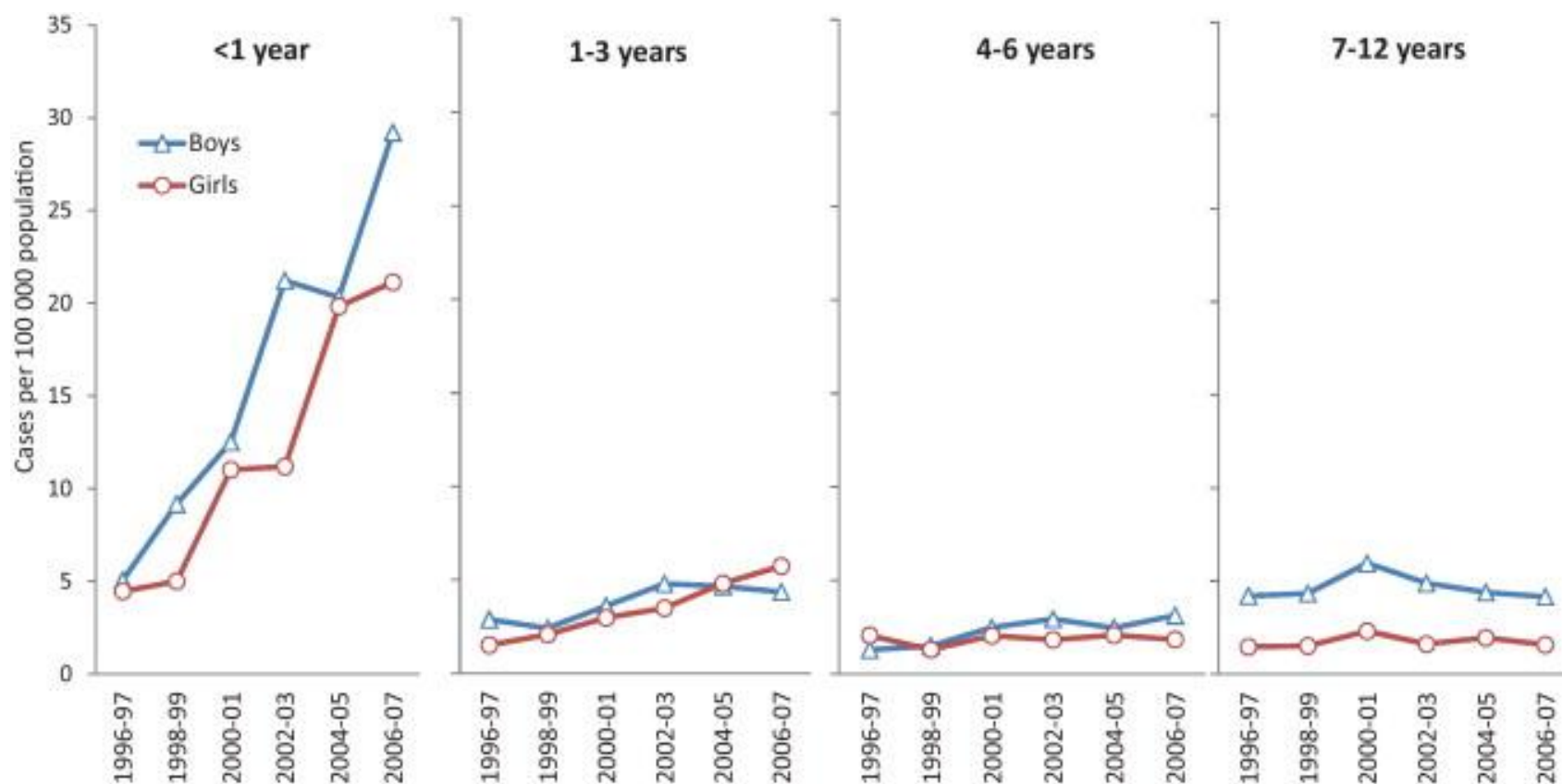
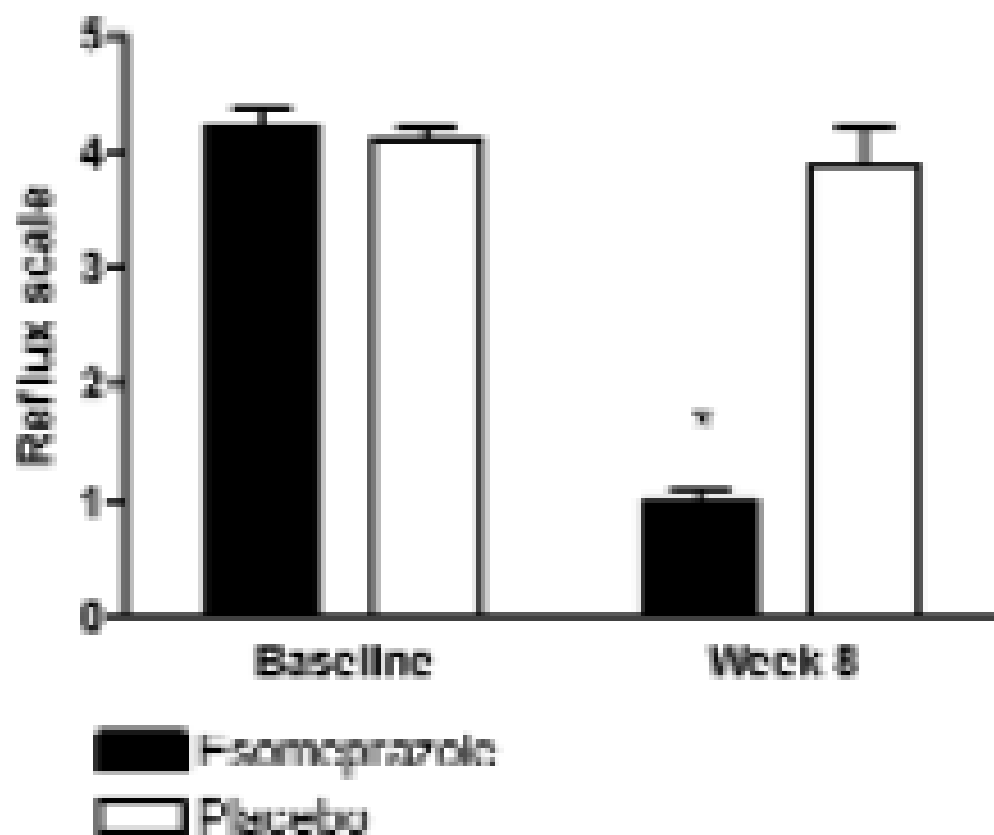
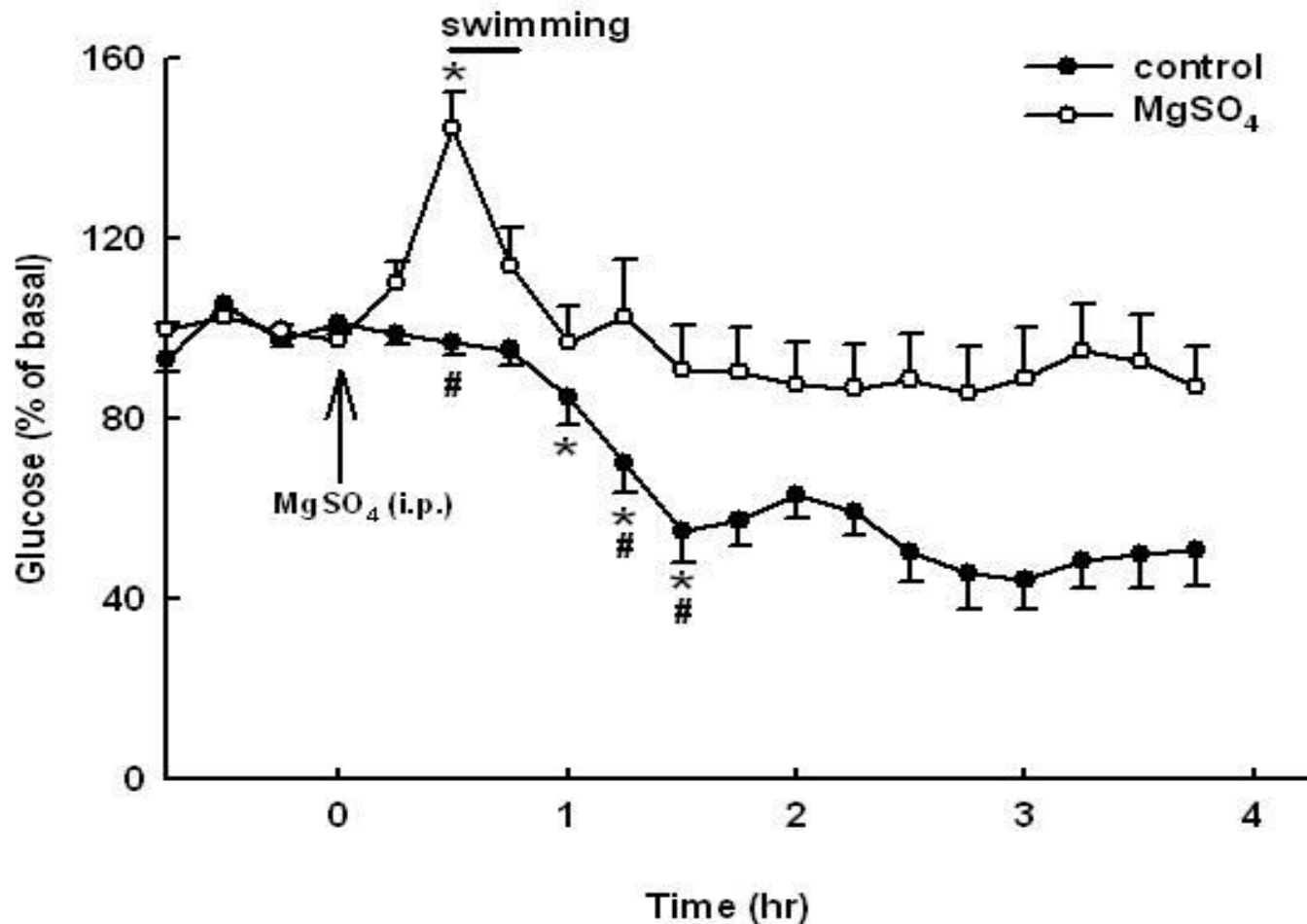


FIGURE 1

Reflux symptom scale using the Gastrointestinal Rating Scale. The reflux symptom decreased significantly from 4.2 at baseline to 1.0 in week 8 in the esomeprazole group ($*P < 0.001$).



Time profiles of the effect of magnesium sulfate on the changes in glucose levels at rest, during swimming and in the recovery period.



Manuscript Writing Template

Title	
Running title	
Corresponding author	
Authors, institutions & e-mail	1.
	2.
	3.
	4.
Results	
Figure 1	
Table 1	
Figure 2	

Figure 1.

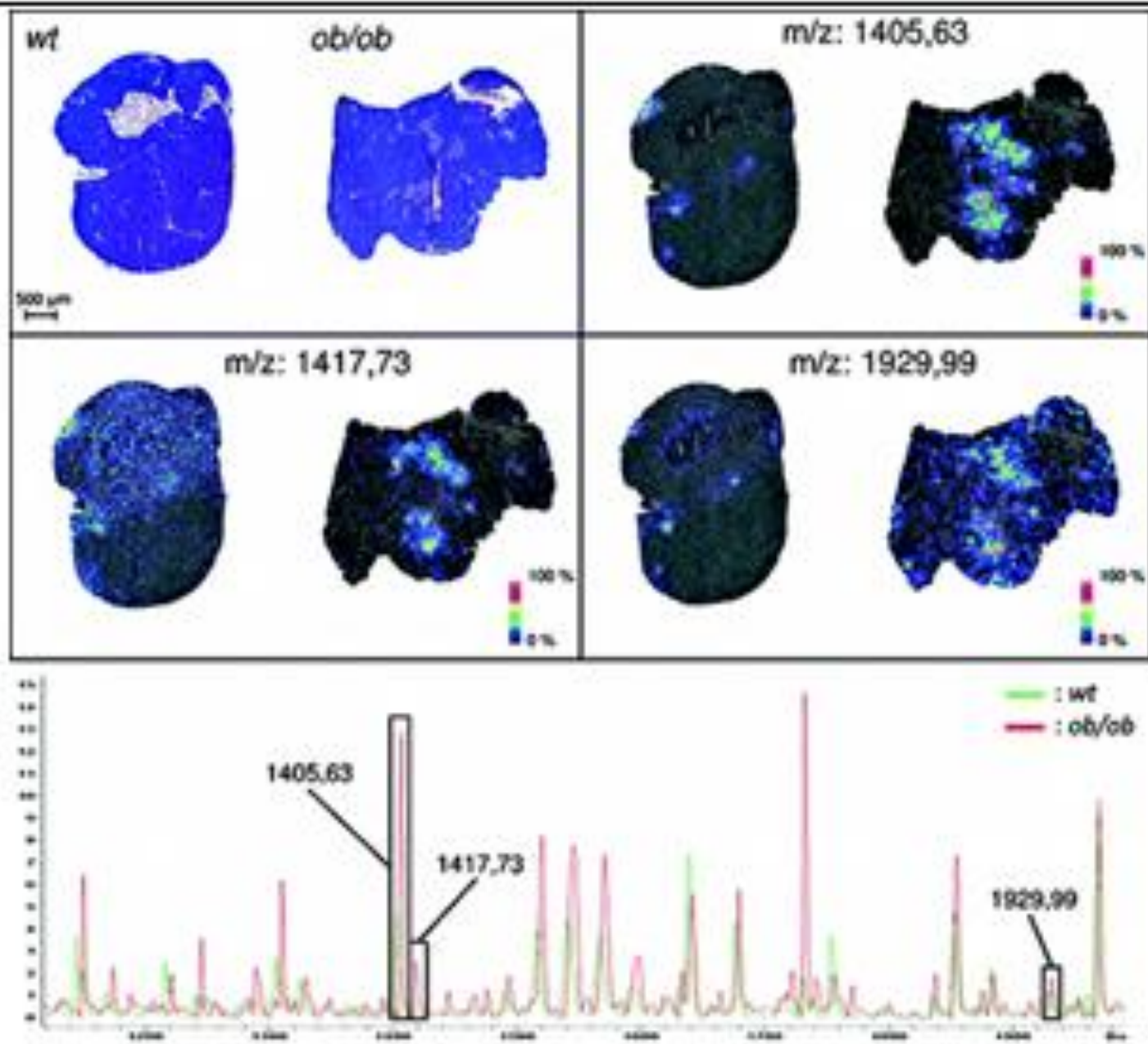
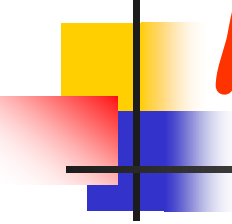


Table 1⁴⁷

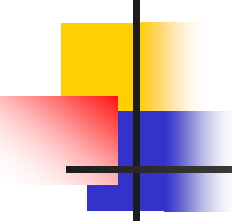
TABLE 1. Characteristics of bone calcium and magnesium

	Calcium	Magnesium
Total body content	1300 g	27 g
Per cent of total in bone	99.9%	60%
Other major reserve(s)	none	muscle
Quantity in bone	1300 g	14 g
Quantity in trabecular bone	220 g	3 g
Quantity in cortical bone	1100 g	11 g
Per cent of trabecular bone reserve lost	50%	50%
during 1st decade following menopause	(110 g)	(2.5 g)
Per cent of cortical bone reserve lost	5%	5%
during 1st decade following menopause	(55 g)	(0.55 g)
Total bone loss during first decade following menopause	165 g	2 g
Maximum quantity exchangeable in 24 h	300 mg	160 mg
Per cent of bone content maximally exchangeable per 24 h	0.023%	1%
Shortest time interval to deplete 25% of total bone reserve	3 years	25 days
Conserving mechanisms	Very efficient and finely tuned	Inefficient paradoxical



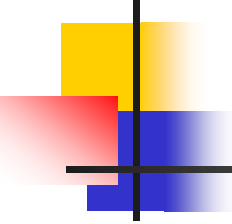
Materials and Methods

- **Study design** is selected & the subjects (patients, animals) to be studied are defined.
- **Interventions** (treatment) are decided on in detail.
- **Measurements** and other observations to be made.
- **Statistical procedures/limitations** for assessment of data.



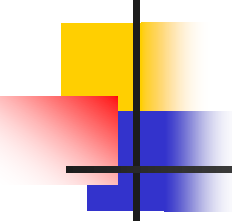
Three category Verbs

- **General verbs:** attempt, consider, conduct, determine, investigate,...
- **Specific verbs:** calculate, extract, isolate, formulate, modify, plot, stimulate..
- **Verbs in your own field:** transfect, clone, dissect, infuse,...



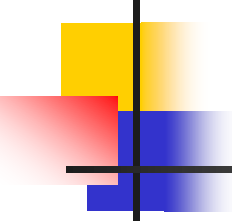
MATERIALS AND METHODS

- (the) tests
- (the) trials
- (the) samples
- Is/are commercial available
- Was/were conducted
- Was/were modified
- Was/were chosen/obtained



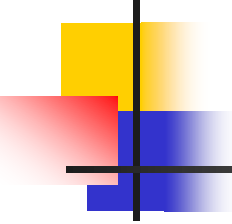
MATERIALS AND METHODS

- The primary tests **used** in this work were a modified version of ..
- All reactions **were performed** in a gas-tightened reactor..
- All cell lines **were incubated** as previous **described** in ...
- Both experiments **were performed** in a ...so that....



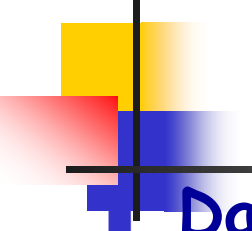
Procedures/Methods

- May include tables and figures
- An issue: level of detail in which to describe
 - Well-known methods
 - Methods previously described but not well known
 - Methods that you yourself devised
- Helpful to use papers published in the same journal as models



Procedures/methods

- **According to..** (as reported by ...)
 - The protein was overexpressed and purified according to ...[1]
- **A modified version of...**
 - The ... is a slightly modified (version of) commercially available model, HP-5895.
- **A novel step was..**
 - Our procedures partly based on reported by .. [2], a novel step was.. ...



Statistical analysis

- Data are expressed as a ratio between the ipsilateral (right) hind paw and contralateral (left) hind paw where possible. The nature of data on animal weight, SSI data, and also on (the **CatWalk** derived) normal step sequence patterns (NSSP) and couplings did not allow for a ratio-presentation of the data.
- Data are expressed as mean $\pm$ standard-error-of-the-mean (S.E.M.). Statistical analysis included analysis of variance (**ANOVA**) with repeated measures over time. This ANOVA was combined with a **Bonferroni post hoc** correction to detect which times points differed from each other.
- A **p-value of 0.05** was regarded as the level of statistical significance.

Writing...An Apple



Originality, Novelty, Significance

mind

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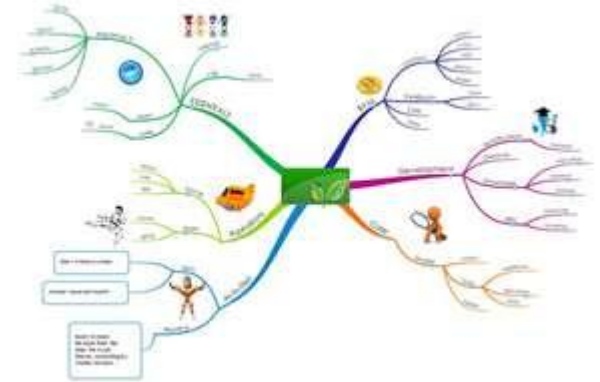
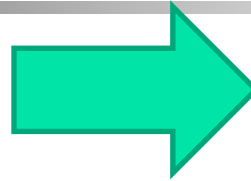
In mind

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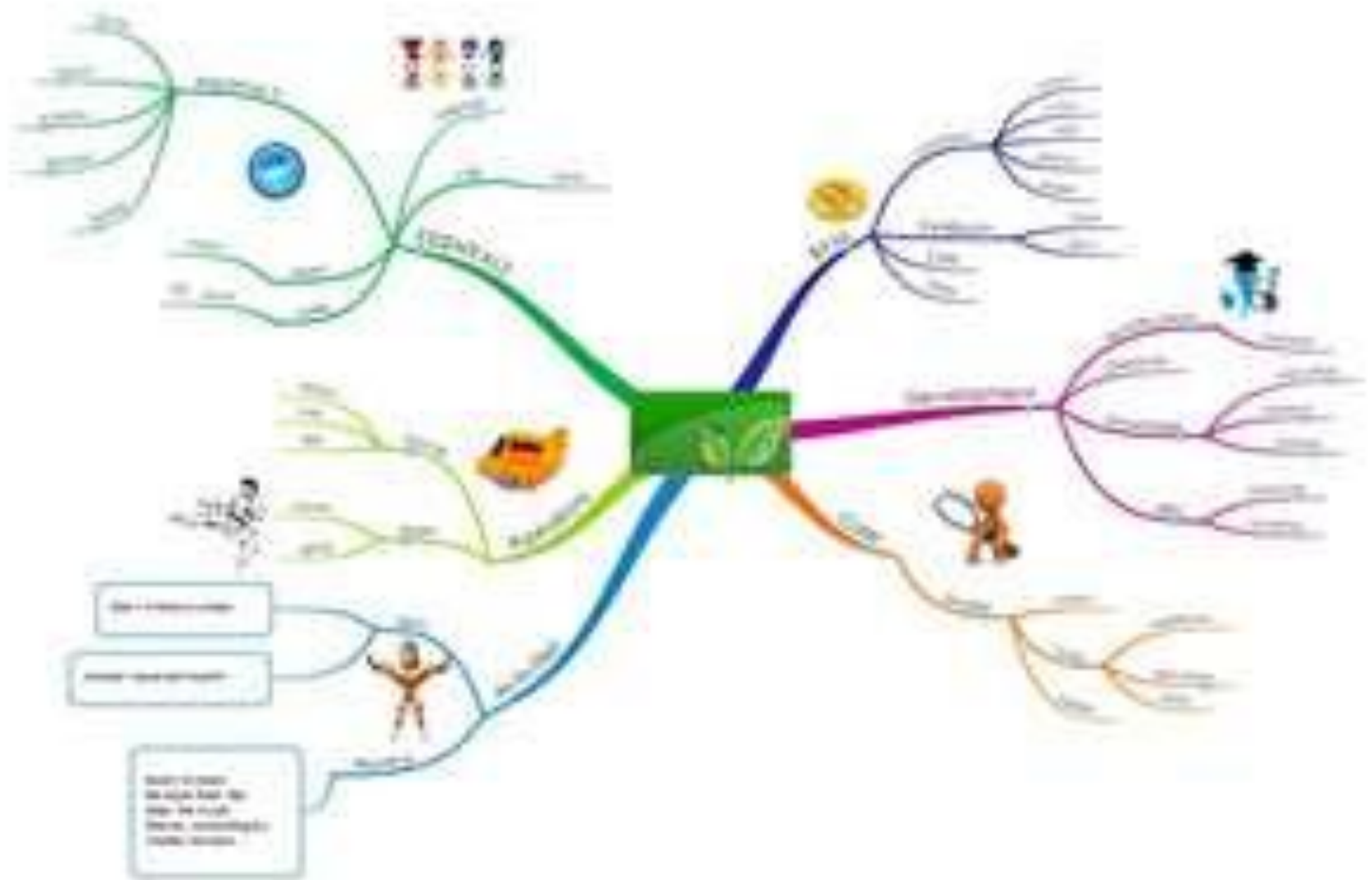


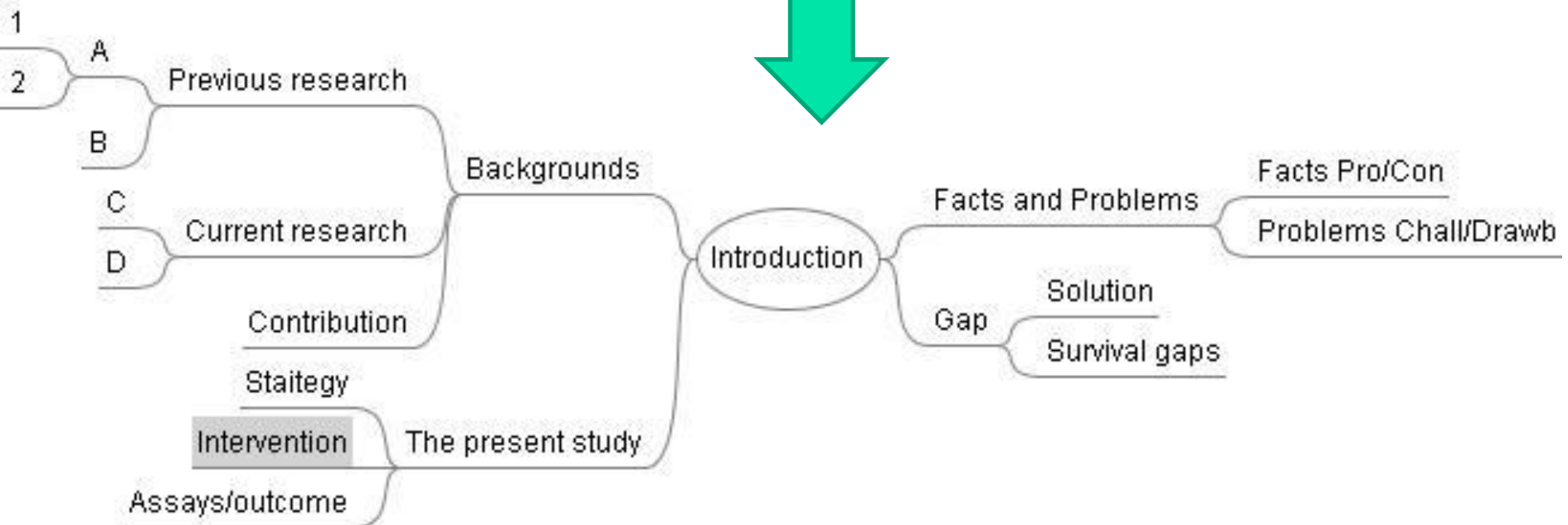
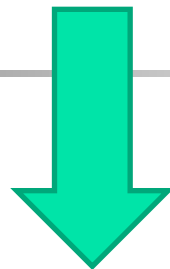
You mind?

A paper

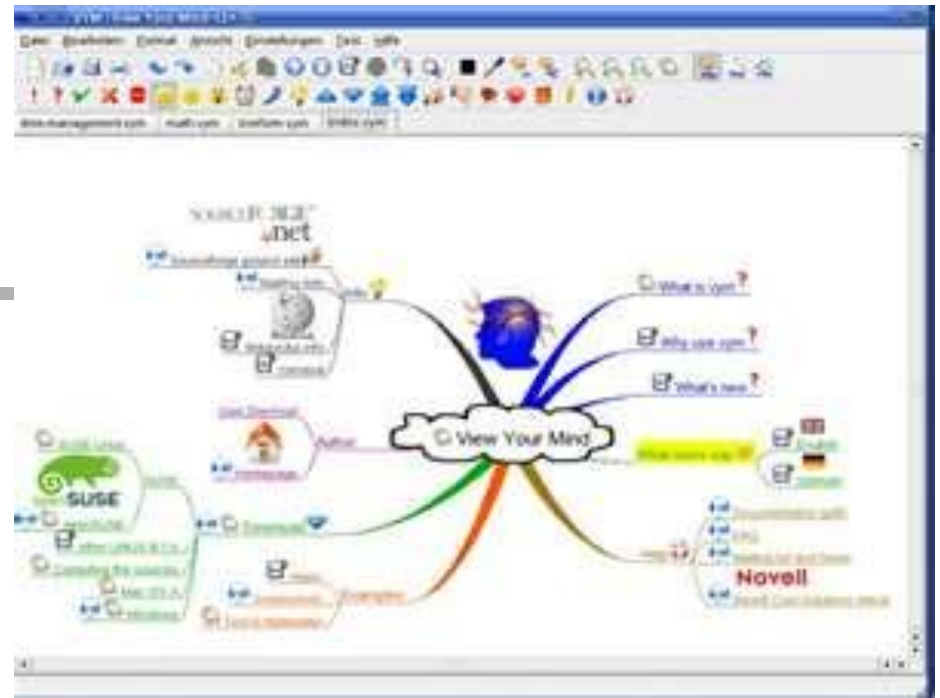


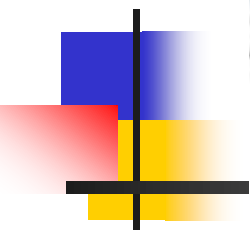
What is in your mind?



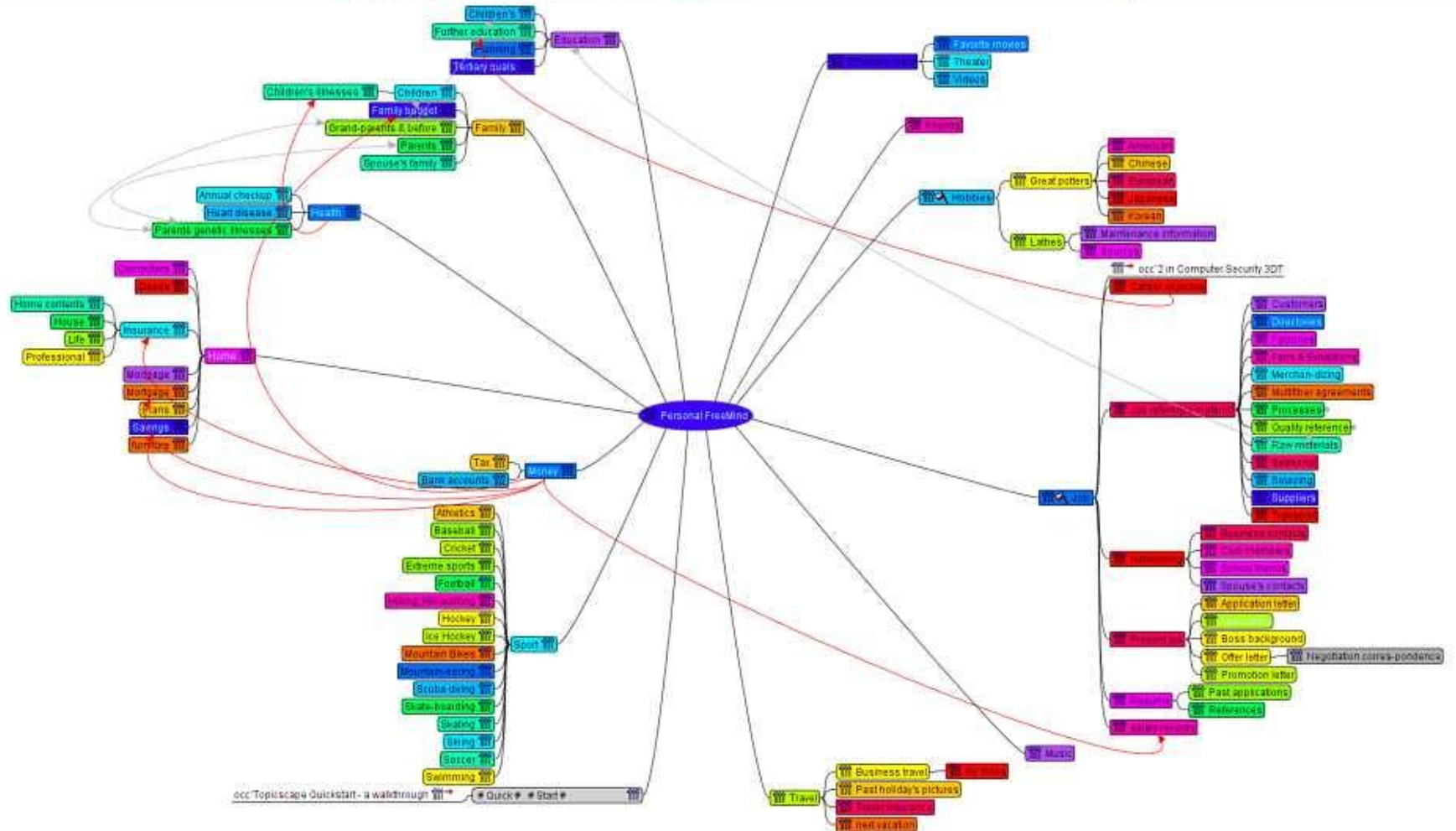


Freemind







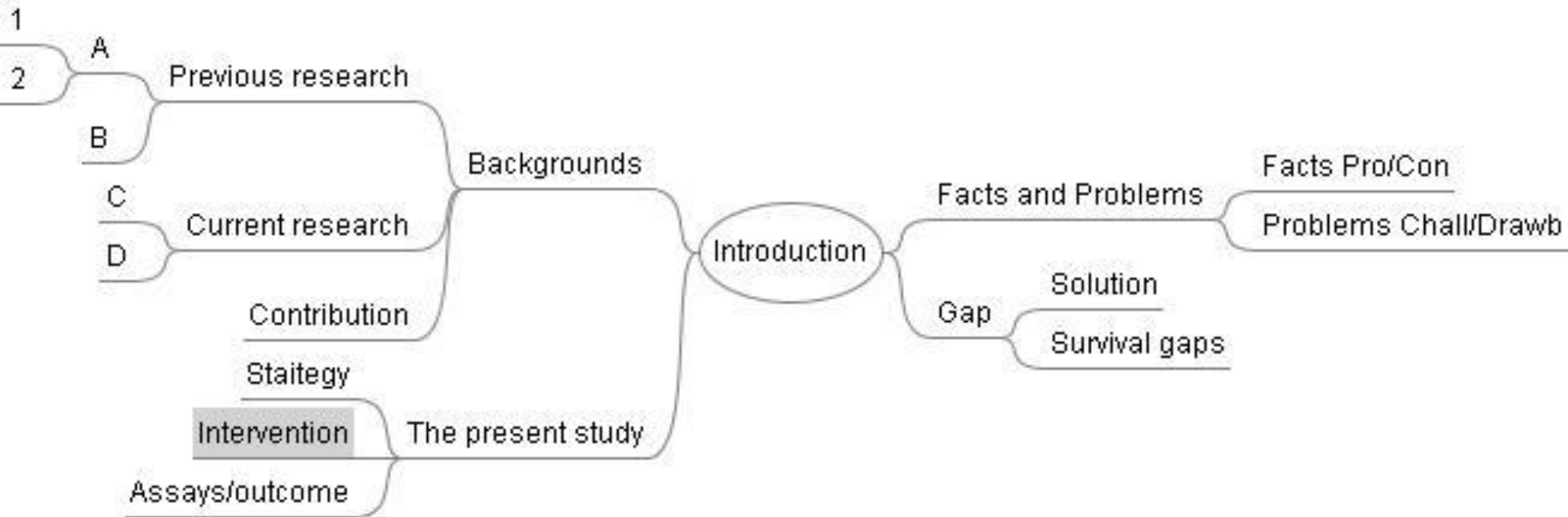


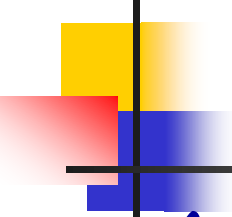


Freemind



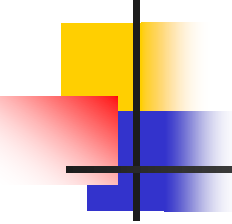
Freemind





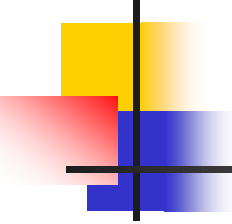
What Do I Have to Say?

- A clear question must be posed before the research is planned.
- The design of the research plan must be adequate.
- The data (tables/figures) must be properly collected, analyzed (statistical procedures) and interpreted.



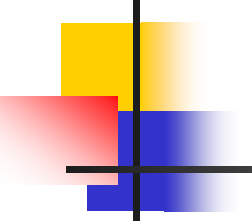
Introduction

- Establish Facts and Problems
- Provide Previous and Current Research
- Locate a Gap to Solve the problems
- Describe the Present work



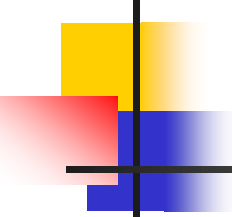
Establish Facts and Problems

- ESTABLISH THE IMPORTANCE OF YOUR FIELD
- PROVIDE BACKGROUND FACTS/INFORMATION
- DEFINE THE TERMINOLOGY IN THE TITLE/KEY WORDS
- PRESENT THE PROBLEM AREA/CURRENT RESEARCH FOCUS



Provide Previous and Current Research

- PREVIOUS RESEARCH
- CURRENT RESEARCH
- CONTRIBUTIONS

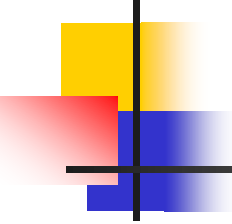


The literature review

- References to **previous & current research** wherever it is useful
- References to **research**
- Providing **a transition** between previous and current research
- Arranging **the order of** all references
 - Chronological
 - Different approaches/models
 - General/Specific to your own

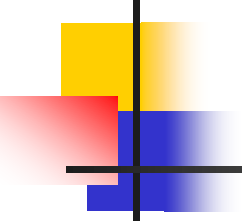
Introduction⁴³

1. importance & problems ⁴³	Magnesium is an essential mineral in whole grains, leafy green vegetables, legumes, and nuts that acts as a cofactor in hundreds of enzymatic reactions in the human body. A considerable body of evidence indicates that a higher intake of dietary magnesium may favorably affect a cluster of metabolic and inflammatory disorders including insulin resistance (1), hypertension (2), <u>dyslipidemia</u> (3), type 2 diabetes (4), metabolic syndrome (5), and cardiovascular disease (6). ⁴³
2. mini review (previous & current) ⁴³	Inverse cross-sectional and prospective associations with intermediate metabolic biomarkers for these disorders, including triglycerides (3), low HDL cholesterol (3), fasting insulin (4), markers of inflammation, and endothelial dysfunction (7, 8), have also been reported in observational settings. Experimentally, a diet low in magnesium led to impaired insulin secretion and glucose uptake (9, 10) as well as acute inflammation (11) in animal models, and in vitro studies suggested that the balance of extra- and intracellular Mg^{2+} in pancreatic cells may be important in the regulation of insulin secretion (12). ⁴³



Locate a Gap to Solve the problems

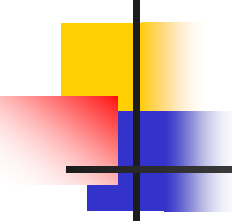
- LOCATE A **GAP** IN THE RESEARCH
- DESCRIBE **THE PROBLEM** YOU WILL ADDRESS
- PRESENT A PREDICTION TO BE TESTED



Describe the Present work

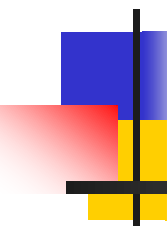
- the **paper** itself
- details about the **methodology**
- announces the **findings**





the Present work

- What its purpose or focus is,
- What its structure is
- The Present Simple Tense
 - This paper is organized as follows..
 - This study focuses on..
- The Past Simple Tense
 - The aim of this project was...

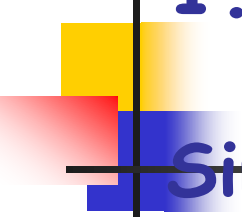


Introduction.1	
1.- importance & problems.1	Magnesium is an essential mineral in whole grains, leafy green vegetables, legumes, and nuts that acts as a cofactor in hundreds of enzymatic reactions in the human body. A considerable body of evidence indicates that a higher intake of dietary magnesium may favorably affect a cluster of metabolic and inflammatory disorders including insulin resistance (1), hypertension (2), dyslipidemia (3), type 2 diabetes (4), metabolic syndrome (5), and cardiovascular disease (6).1
2.- mini-review (previous & current).1	Inverse cross-sectional and prospective associations with intermediate metabolic biomarkers for these disorders, including triglycerides (3), low HDL cholesterol (3), fasting insulin (4), markers of inflammation, and endothelial dysfunction (7, 8), have also been reported in observational settings. Experimentally, a diet low in magnesium led to impaired insulin secretion and glucose uptake (9, 10) as well as acute inflammation (11) in animal models, and in vitro studies suggested that the balance of extra- and intracellular Mg^{2+} in pancreatic cells may be important in the regulation of insulin secretion (12).1
3.- gap.1	However, the underlying molecular mechanisms for the observed metabolic effects of magnesium remain unclear. Because of limited and conflicting data from randomized clinical trials (13–17), whether magnesium supplementation can be effective in improving metabolic and inflammatory profiles in apparently healthy individuals at risk of metabolic abnormalities remains uncertain. Moreover, none of the few randomized studies have applied a systems-biology approach to examine the mechanistic effects of magnesium supplementation on gene expression and protein profiling.1
4.- the present study.1	Therefore, to comprehensively investigate potential biological effects of oral magnesium supplementation in relation to metabolic biomarkers and global genomic and proteomic profiles, we conducted a randomized, controlled, crossover trial in apparently healthy, normotensive individuals.



Changes in Depressive Symptoms, Social Support, and Loneliness Over 1 Year After a Minimum 3- Month Videoconference Program for Older Nursing Home Residents

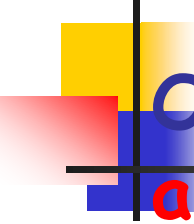
Journal of Medical Internet
Research, 2011; 13 (4) e93



1. Facts and Problems

Similar to other countries, Taiwan has more and more older people living in nursing homes. The number of nursing homes in Taiwan grew from 10 in 1995 to 372 in 2010 [1], indicating the great need for health care professionals trained in taking care of older institutionalized adults. Nursing home placement has been widely discussed in the literature as a stressful life event that challenges older people [2].

2. mini-review



Older people who live in nursing homes have a higher prevalence of depression, which contributes to excessive morbidity [3], than do those who live in communities [4]. This prevalence of depression varied from 25% to 45% in Western countries [5,6] and was 52%-54% in Taiwan [7-9]. Many nursing home residents also experience loneliness [10], which has been associated with cognitive deterioration and hopelessness [11]. Thus, interventions have been used to enhance the quality of life in this group of people [12].



One important aspect of social support for older nursing home residents is continuous involvement of **family members**. However, **one-third** of nursing home residents were found to **seldom have visitors** [18]. If ~~..relocated .. even fewer visitors~~ [19]. However.. family members may have limited time to visit residents in person, **telephone calls** can reduce residents' loneliness [20]. With rapid advances **in telecommunication technology**, real-time audiovisual linkups are now possible among multiple locations via affordable **software and hardware** [21]. Providing real-time audiovisual telecommunication systems to nursing home residents in **Hong Kong** [21] and **Japan** [22] has been shown to add a new dimension for the majority who lack the skills and capacities to adapt to the nursing home environment.

3. Gap

Elderly nursing home residents in Taiwan were shown by Tsai and colleagues [24] to have significantly **fewer** depressive symptoms **and less** loneliness after **a 3-month program of 5 minutes/week of videoconference interactions with family members**. These studies demonstrate ... for individuals living either in the community or in institutions to communicate. However, those studies had **small sample sizes or used a cross-sectional design**. Therefore, larger longitudinal studies are needed to make causal claims about the relationship between the effectiveness of videoconferencing and participants' depressive status and loneliness and to improve the generalizability of results.

4. The present study



To date, no empirical studies have used a longitudinal design to examine the effectiveness of videoconferencing for nursing home residents in Taiwan. Understanding the effectiveness of videoconferencing in Taiwanese nursing homes would fill the knowledge gap on this topic. Thus, the purpose of this study was to evaluate the long-term follow-up effectiveness of a videoconference intervention program on nursing home residents' social support, loneliness, and depressive status after a minimum 3-month videoconference program.

Method: Videoconference program

The videoconference program used laptops and Internet communication programs. Nursing home residents were asked to use the Internet at least once a week, with help from a trained research assistant, who spent at least 5 minutes per week with each resident for the first 3 months ... This weekly frequency .. in-person visits to a nursing home resident for the majority of families [28,29], ... After 3 months, whenever residents wanted to have a video communication with their family, they were helped by the nursing home. .. spouse, child, grandchild, or significant other. The communication programs used were MSN or Skype wireless modem run on a large-screen (15.6 inch) laptop.



Incidence of hospitalization due to child **maltreatment** in Taiwan, 1996-2007: A nationwide population-based study

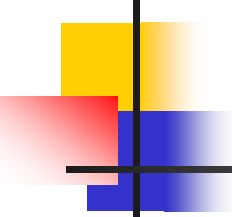
Child Abuse & Neglect, 2012;
(36) 135-141

1. Facts and problems



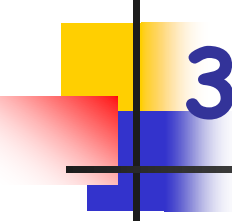
Child maltreatment is a challenging global public health issue (1-3).

Estimation of the incidence of child maltreatment is an essential step to prevent this health problem that can potentially be averted. Nevertheless, according to recent reviews, most incidence studies have been hospital-based, and few have been population-based (4-6).



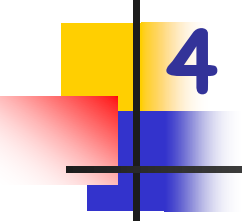
2. Mini-review

Most previous population-based incidence studies have been confined **to a state only** (7-12). With the growing availability of **nationwide administrative databases** (Nationwide Inpatient Sample of the Healthcare Cost and Utilization Project in the US), more and more studies have estimated the national **incidence of hospitalization due to child maltreatment** (13-17).



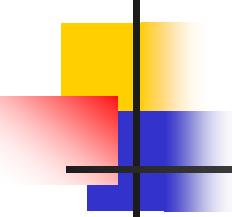
3. Gap

Despite many population-based incidence studies having been published, few have examined the incidence by age group (18-22), and only one study has assessed the trends in incidence by age group (19). All of the above-mentioned studies were performed in **the US or UK**, and no study, to the best of our knowledge, has examined the incidence of child maltreatment **in Asian countries**.



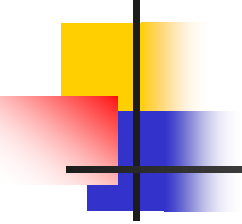
4 The present study

We thus aimed in this study to estimate the incidence of hospitalization coded as due to child maltreatment by age group using nationwide inpatient claims data of the National Health Insurance (NHI) of Taiwan for the years 1996 through 2007 for estimation.



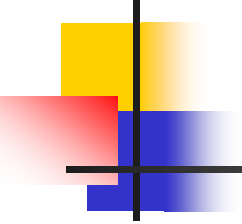
Discussion

- The **heart** of the paper
- State the **interpretations and opinions**, explain the implications of findings and make suggestions **for future research**
- Outline and organization of discussion
 - Outline items from **specific to general**
 - Expand each item
 - Cluster map and issue tree...etc



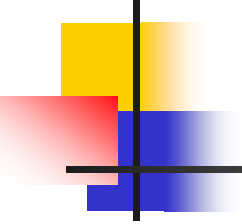
Discussion

- Often **begin** with a brief summary of **the main findings**
- Should **answer** the question stated in the introduction
- Some other items commonly addressed:
 - **Limitations of the study**
 - **Relationship to findings of other research**
 - **Other research needed**



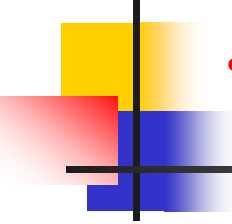
Discussion

- Revisiting previous sections & summarising **key results**
- **Mapping** (relationship to existing research)
- Achievement/Contribution refining the **implications**
- **Limitations**/current and future work/**applications**



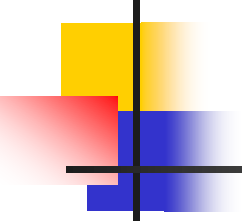
Discussion (overall)

- State the **central conclusion** from your data in this study – **first paragraph**
- Provide **evidence-base data** from other papers
- Raise **viewpoints** and findings from your interpretation of these data (**do not over-rule**)
- Support your **hypothesis** or tentative **mechanisms**



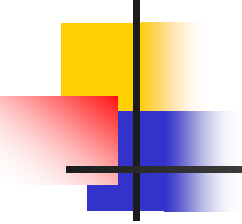
State the central conclusion- first paragraph

- The main question...was (whether)...
- Our results shown...
- It is hypothesized that....
 - We hypothesized
 - Two possible mechanisms may...
 - Supplemental magnesium enhances..
- Some evidence support (or argument)...



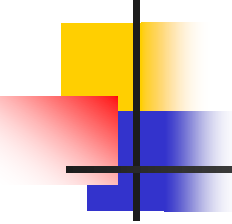
Discussion (each item)

- **Point out** findings/contribution
- **Explain** how your results relate to expectations and literature
- **Discuss** and evaluate conflicting explanations of the results
- **Defend** your answer, **if necessary**, by explaining both **why** your answer is satisfactory and **why** others are not



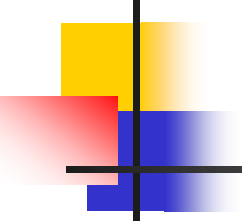
Conclusion

- A default approach is to treat it as **an extended abstract**. But this is also an opportunity to be reflective about what you learned, the uncertainties remaining, the links to other problems, etc.
 - **First paragraph:** focus on what you did. Begin with “We have used...”, “We have investigated...”
 - **Following paragraphs:** one major finding per paragraph. First sentence states the finding, following sentences elaborate.
 - **Final paragraph:** should have some forward-looking perspective. Don't let paper finish on a whimper!



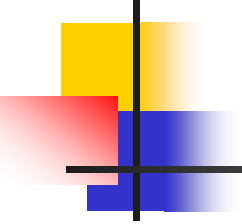
Abstract

- The first section read and sets the tone of the paper for the editor & reviewers
- A condensed version of the manuscript
 - Objective, method and materials
 - Major observations, Result
 - Conclusion
- Conveys only the essential information & Remove extra words and phrases (<160-300 words)



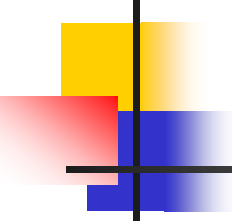
Abstract

- Abstract is of course **the most important part** of the paper - many readers will read **just that**.
- Focus on what is new - **essential ideas**, essential numbers.
- **One fact/idea per sentence**.
Everything that you would like the casual reader to remember should be there.



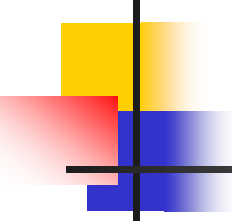
Acknowledgments

- A place to **thank** people who helped with the work but **did not** make **contributions** deserving authorship
- **Permission** should be obtained from people you wish to list
- Sometimes the place where sources of **financial support** are stated



Acknowledgements

- We **thank** ...(kind supporting or..)
- The study was supported by National Research Council, Taiwan (**NSC-99**-..) and Taichung Veterans General Hospital and Providence University (**TCVGH-PU-99**.....).
- The authors thank Dr. ... and Dr. ... for...



Implications, competing interests & contributions

- Clinical implications & limitations
- The authors declare that they have no competing interests.
- The authors declare no competing financial interests.
- Authors contributions



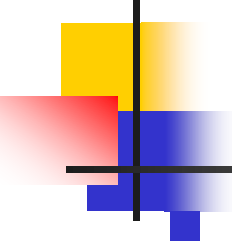
Authors' contributions

- **MERT:** Designed and supervised most of the molecular studies; analyzed sequences and interpreted results. Participated in the preparation of the manuscript.
- **HAVS:** carried out molecular techniques and participated in the analysis of results.
- **VJB:** carried out immunoassays and interpreted the results.
- **MDV:** responsible for the clinical aspects of the study, including the recruitment of patients.



Authors' contributions

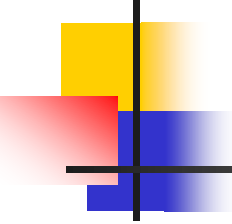
- **JT:** Participated in the designed of the study and in the analyses and interpretation of the results. Critical review and edition of the manuscript.
- **OMH:** Participated in the clinical designed of the study and in obtaining financial support for the study.
- **MTAM:** responsible for the design of the study and for acquiring financial support. Supervision of the experimental work. Participated in the drafting of the manuscript.



References

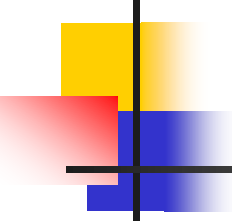
■ Functions:

- To give credit
- To add credibility
- To help readers find further information
- Importance of accuracy
- Existence of various reference formats
- Availability of citation management software (EndNote XIV)



References

- Extensive literature **review & updated**
- Read **recent** research articles & reviews
- Regarding the **methodologies**, cite original papers
- Match the content **mentioned & discussed** in the text
- Avoid citation of **too many your owns**



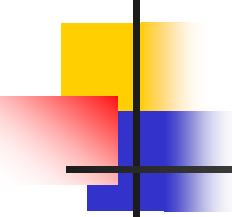
Typical manuscript format

- Introduction 1 page, 300 words
- Materials 2 pages, 600 words
- Results 2 pages, 600 words
- Figures 1-2 pages
- Tables 1-2 pages
- Discussion 3-4 pages, 900-1200 words



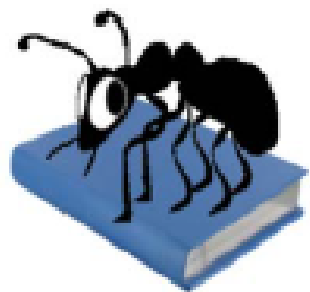
Discussion .1	
1. key results .1	.1
2. mapping .1	.1
3. achievement or contribution .1	.1
4. limitations .1	.1
Conclusion .1	
1. focus on what you did .1	.1
2. major findings .1	.1
3. forward-looking .1	.1
Abstract .1	
1. Objective .1	.1
2. Method and materials .1	.1
3. Key results .1	.1
4. Conclusion .1	.1
Keywords .1	.1
Acknowledgement .1	
1. thank people who helped .1	.1
2. financial supports .1	.1
3. technical supports .1	.1
Key Reference (by End Note X4) .1	
1. .1	.1
2. .1	.1





Corpus and Computational Linguistics Research

- **Antconc** (a freeware, multiplatform tool for carrying out corpus linguistics research and data-driven learning.)
(<http://www.antlab.sci.waseda.ac.jp/software.html>)
- **WriteAhead**: An Abstracts Writing Assistant System for Academic Writing
(<http://nlp.cs.nthu.edu.tw/writeahead>)
- **Corpus**
(<http://corpus.ling.sinica.edu.tw/index.html>)



AntConc (Windows, Macintosh OS X, and Linux)

Build 3.2.4

Laurence Anthony, Ph.D.

Center for English Language Education in Science and Engineering, School of Science and Engineering, Waseda University, 3-4-1 Okubo, Shinjuku-ku, Tokyo 169-8555, Japan

October 4, 2011

Introduction

AntConc is a freeware, multiplatform tool for carrying out corpus linguistics research and data-driven learning. It runs on any computer running Microsoft Windows (tested on Win 98/Me/2000/NT, XP, Vista, Win 7), Macintosh OS X (tested on 10.4.x, 10.5.x, 10.6.x), and Linux (tested on Ubuntu 10). It is developed in Perl using ActiveState's PerlApp compiler to generate executables for the different operating systems.

Installation

Windows

On Windows systems, simply double click the *AntConc* icon and this will launch the program. No installation is necessary.

Macintosh OS X

On Macintosh systems, first install and launch X11. X11 is a graphical toolkit that is available on the disks included with the computer or via the Apple website. Next, double click double click the *AntConc* icon and this will launch the program. No installation is necessary.

Corpus Files

Total No. 0

Concordance

Concordance Plot

File View

Clusters

Collocates

Word List

Keyword List

Hit	KWMC	File

Search Term ☒ Words ☐ Case ☐ Regex

Advanced

Concordance Hits

0

Search Window Size

50

Start

Stop

Sort

Close Window

Corpus Files

taa_unit1.txt
 taa_unit2.txt
 taa_unit3.txt
 taa_unit4.txt
 taa_unit5.txt
 taa_unit6.txt
 taa_unit7.txt
 taa_unit8.txt
 taa_unit9.txt
 taa_unit10.txt
 taa_unit11.txt
 taa_unit12.txt

Concordance

Concordance Plot

File View

Clusters

Collocates

Word List

Keyword List

Hit	KWIC	File
1	the advance of hospice is allowing more and more terminally i	taa_unit2.tx
2	t, so Montgomery County is doing well. Esther Bowring is the c	taa_unit3.tx
3	rogram is expanding. It is encouraging composting. It is requi	taa_unit3.tx
4	nty's recycling program is expanding. It is encouraging compos	taa_unit3.tx
5	ycling programs. And it is expanding the materials it will acc	taa_unit3.tx
6	t probably that student is going to be working. They might be	taa_unit1.tx
7	a year or two or three is going to be possible to do in a hum	taa_unit9.tx
8	h year. And this amount is growing. Dealing with trash is cost	taa_unit3.tx
9	ch year, and the amount is growing. How to reduce the waste ha	taa_unit3.tx
10	here, where the county is hiring people to do this job. And t	taa_unit3.tx
11	nce that the commission is making the marketplace safer for Am	taa_unit11.t
12	cturing, and its impact is reaching markets around the world.	taa_unit6.tx
13	ay in the U.S., hospice is reaching out to others. John Mahon	taa_unit2.tx
14	terminal patients that is reassuring, tranquil, and respectfu	taa_unit2.tx
15	ouraging composting. It is requiring businesses and large apar	taa_unit3.tx
16	nts that landfill space is running out and that people need to	taa_unit3.tx
17	issue, where the county is saving money by not having to send	taa_unit3.tx
18	e early warning, Bedard is studying how best to deploy his dev	taa_unit5.tx
19	around the country. He is studying how to do that now. In the	taa_unit5.tx

Search Term ☒ Words ☐ Case ☐ Regex

is *ing

Advanced

Concordance Hits

21

Search Window Size

50

Total No. 12

Files Processed

Reset



Kwic Sort

☒ Level 1 ☐ 1R ☐ Level 2 ☐ 2R ☐ Level 3 ☐ 3R

Save Window

Exit

Corpus Files

taa_unit1.txt
 taa_unit2.txt
 taa_unit3.txt
 taa_unit4.txt
 taa_unit5.txt
 taa_unit6.txt
 taa_unit7.txt
 taa_unit8.txt
 taa_unit9.txt
 taa_unit10.txt
 taa_unit11.txt
 taa_unit12.txt

Total No. 12

Files Processed

Reset



Concordance

Concordance Plot

File View

Clusters

Collocates

Word List

Keyword List

Hits

31

File: taa_unit5.txt

Produced by a thunderstorm, a tornado is a column of violently **rotating** air. Because they usually appear suddenly, tornados can be highly dangerous. Fortunately, a scientist has discovered that a tornado makes a peculiar sound as it is first **forming**. This sound's tone is so low that humans cannot naturally hear it. The scientist, however, has invented a way of **picking** up the sound with a special sensor. **Using** it, he hopes one day to be able to warn people that a tornado may soon be on the ground in their area. This new technology will certainly lower our anxiety about these powerful storms, and it could save lives.

A tornado makes a good deal of noise. In fact, some say a twister sounds like a hundred **speeding** freight trains. A professor named Al Bedard, however, has discovered that tornados make another sound, too, one that he can hear **using** a special device. Bedard calls his invention an "overgrown ear."

Bedard made his device out of some garden hoses and a microphone. The microphone is connected to computers. **According** to Bedard, sound waves from the tornado follow the tubes down to the microphone. Then the computers amplify the unusual, low-frequency tornado sound. The professor's device can hear this sound before the funnel cloud appears. This is important because it means Bedard can discover a new tornado faster than the current method, radar, does.

Bedard learned that tornados make special sounds by **studying** water funnels. This taught him to view tornados as if they were loudspeakers. Like loudspeakers, tornados push against the air around them. This contracts the air, **creating** a sound wave. Some of these sound waves have a low frequency, too low for humans to hear naturally, but Bedard's computers can hear them.

Search Term ☒ Words ☐ Case ☐ Regex

*ing

Advanced

Start

Stop

Hit Location

1



Save Window

Exit

Corpus Files

Changes in brai
depression in t
High prevalence
Magnesium in me
Nutritional Nev
Schizophrenia F
Zinc deficiency
Magnesium intak
magnesium statu
Reversal of typ
What about magr
A connection be
A connection be
A model of the
A TRPM7 variant
Abstracts of 9t
Abstracts of Jc
Abstracts of Jc
Abstracts of Jc
Abstracts of Jc
Abstracts of Jc
Abstracts of Th
Acid-base condi
Ageing, hippoca
Altered ionized
Antagonism betw
Anxiety and str
Archives of Bic
Are the transic

- Concordance
- Concordance Plot
- File View
- Clusters
- Collocates
- Word List
- Keyword List

Hit	K/M/C	File
1	otic mitochondrial magnesium transporter 4. Here we determine	Crystal stru
2	Mg2l . The CorA magnesium transporter is a homopentamer wi	Crystal stru
3	. J. The bacterial magnesium transporter CorA can functionall	Crystal stru
4	re ME 1998 The CorA magnesium transporter gene family. Microb	Dual-Functio
5	ologue, a candidate magnesium transporter . Genomics 72:158 ;V	Dual-Functio
6	ld be expected of a magnesium transporter (Fig. 5). In conson	Identificati
7	edicated mammalian magnesium transporter . The function of Mag	Identificati
8	identified a novel magnesium transporter , probably a channel	Identificati
9	RJ: The bacterial magnesium transporter CorA can functionall	Identificati
10	logue, a candidate magnesium transporter . Genomics 2001, 72:	Identificati
11	E. (1998) The CorA magnesium transporter gene family. Microb	Mg2+ homeost

Search Term ☒ Words ☐ Case ☐ Regex

magnesium transporter

Advanced

Concordance Hits

11

Search Window Size

50

Corpus Files

Changes in brai
depression in t
High prevalence
Magnesium in ma
Nutritional Nev
Schizophrenia F
Zinc deficiency
Magnesium intak
magnesium statu
Reversal of typ
What about magr
A connection be
A connection be
A model of the
A TRPM7 variant
Abstracts of 9t
Abstracts of Jc
Abstracts of Jc
Abstracts of Jc
Abstracts of Jc
Abstracts of Jc
Abstracts of Th
Acid-base condi
Ageing, hipposc
Altered ionized
Antagonism betw
Anxiety and str
Archives of Bic
Are the transic

- Concordance
- Concordance Plot
- File View
- Clusters
- Collocates
- Word List
- Keyword List

Hit	KWIC	File
123	ne-Delalande B. Loss of MAGT1 abrogates the Mg2+ flux	Loss of MAGT
124	of the Mg2+ transporter MAGT1 as the cause of this d	Loss of MAGT
125	d an Mg2+ flux through MAGT1 that was important for	Loss of MAGT
126	we ruled out large MAGT1 in T cell signaling +	Loss of MAGT
127	nt in both patients in MAGT1 , a gene coding for a M	Loss of MAGT
128	on of the exon 7 of MAGT1 and induced the splicing	Loss of MAGT
129	led to a decrease of MAGT1 mRNA of .80 % by nonse	Loss of MAGT
130	leading to the loss of MAGT1 protein expression in th	Loss of MAGT
131	sion in the patients. MAGT1 deficiency impairs TCR-in	Loss of MAGT
132	about the function of MAGT1 in lymphocytes prior to	Loss of MAGT
133	AL. 293T) showed that MAGT1 induces a highly selecti	Loss of MAGT
134	ich was consistent with MAGT1 as a Mg2+ transporter i	Loss of MAGT
135	defect and the loss of MAGT1 in the patients, we loo	Loss of MAGT
136	h ectopic expression of MAGT1 , restoring the TCR-induce	Loss of MAGT
137	results established that MAGT1 mediated the Mg2+ influx	Loss of MAGT
138	cell activation. Thus, MAGT1 deficiency was the proba	Loss of MAGT
139	of PLC 1 activation in MAGT1 -deficient patients Sinc	Loss of MAGT
140	Mg2+ influx mediated by MAGT1 after TCR stimulation wa	Loss of MAGT
141	d for by overexpressing MAGT1 in the B cell line [21	Loss of MAGT

Search Term

☒ Words ☐ Case ☐ Regex

Concordance Hits

263

Search Window Size

50

MagT1

Advanced

Corpus Files

- What about magn
- A connection be
- A connection be
- A model of the
- A TRPM7 variant
- Abstracts of 9t
- Abstracts of Jc
- Abstracts of Jc
- Abstracts of Jc
- Abstracts of Jc
- Abstracts of Jc
- Abstracts of Th
- Acid-base condi
- Ageing, hippos
- Altered ionized
- Antagonism betw
- Anxiety and str
- Archives of Bic
- Are the transie
- Assessment of c
- Assessment of m
- Assessment of s
- Biochemical mec
- Biomimetic stud
- Blood magnesium
- Bovine glucose
- Calcium and ma
- Calendar of ma
- Changes of blo

Concordance Concordance Plot File View Clusters Collocates Word List Keyword List

Hit	KWIC	File
1	le of healthy subjects during exercise and initial recovery	In vivo asse
2	le of a healthy subject during exercise and post-exercise reco	In vivo asse
3	of 42 healthy subjects during exercise and recovery, plotted	In vivo asse
4	] in human calf muscle during exercise and recovery reported	In vivo asse
5	r use of carbohydrates during exercise and thus a beneficial	Update on th
6	sma zinc concentration during exercise cannot be attributed t	Magnesium, z
7	ygen species production during exercise has been reviewed by	Update on th
8	onal changes occurring during exercise influence the cellular	Selected abs
9	ing in skeletal muscle during exercise is actually the conseq	In vivo asse
10	nge in plasma magnesium during exercise is an indication of a	Update on th
11	route of magnesium loss during exercise is sweat and cellular	Magnesium, z
12	ase in serum magnesium during exercise most likely indicates	Update on th
13	ase in serum magnesium during exercise. Nonetheless, the incr	Update on th
14	f Mg by active tissues during exercise. The results suggest	Selected abs

Search Term ☒ Words ☐ Case ☐ Regex

during exercise

Advanced

Concordance Hits

14

Search Window Size

50

ninja words

A really fast dictionary... fast like a ninja.

look up

random

soda pop

noun

- (regional in US) Any of several sweetened, carbonated beverages.

"On a hot day, there's nothing I like more than soda pop."

synonyms: [pop](#), [soda](#), [fizzy](#), [tonic](#) [more»](#)

pop

noun

- A loud, sharp sound as of a cork coming out of a bottle.
"Listen to the pop of a Champagne cork."
- (colloquial) an effervescent or fizzy drink most frequently nonalcoholic; soda pop.

Your history

[soda pop](#)

[pop](#)

[energy drink](#)

[energy](#)

[crash](#)

[jolt](#)

[suit](#)

[compound](#)

[Red Bull](#)

[red bull](#)

« »

ninja words

A really fast dictionary... fast like a ninja.

look up

random

energy drink

noun

- A caffeinated soft drink containing added ingredients advertised as increasing alertness, performance etc.

soda pop

noun

- (regional in US) Any of several sweetened, carbonated beverages.

"On a hot day, there's nothing I like more than soda pop."

synonyms: pop, soda, fizzy, tonic [more»](#)

Your history

soda pop

pop

energy drink

energy

crash

jolt

suit

compound

Red Bull

red bull

參考學科：生命科學 (we also)

Central and peripheral glucose mobilization and utilization are required during exercise and are responsible for exercise efficacy. The aim of this study

○ 字詞 (Word)

species
study
system
such
showed
some
suggest

○ 片語 (Phrase)

○ 轉折語 (參考教材)

In addition,
In this study,
In contrast,
In this paper,
In conclusion,
On the other hand



An Abstract Writing Assistant System for Academic Writing

參考學科：生命科學 (allow for)

Central and peripheral glucose mobilization and utilization are required during exercise and are responsible for exercise efficacy. The aim of this study was to monitor dynamic changes in glucose and its metabolites of muscle, blood and brain in exercising rats, simultaneously. Rats were divided into the control and magnesium-supplemented groups. A catheter was cannulated into a jugular vein, two microdialysis probes were implanted in brain and muscle in each rat. Rats were forced exercise on a treadmill at a speed of 20 m·min⁻¹ for 60 min. Dynamic changes of glucose, pyruvate, and lactate concentrations in the blood, muscle and brain were determined before, during, and after exercise for 5.5 hours. In the evaluation of enhanced exercise, magnesium sulfate (90 mg·kg⁻¹, ip.) was administered 30 min before exercise in rats. The newly developed technique will allow for

○ 字詞 (Word)

○ 片語 (Phrase)

successful delivery
of thalidomide
such a high-latitude
successful delivery
of
successful delivery
such a

○ 轉折語 (參考教材)

In addition,
In this study,
In contrast,
In this paper,
In conclusion,
On the other hand



當將你的事交託耶和華，
並倚靠他，他就必成全。

After service
fucheng@vghtc.gov.tw

