

# Manuscript Style Guide 만들기

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# Instruction for Authors / Manuscript Style Guide / Manuscript Template

- ▶ Instruction for Authors

- 투고규정

- 저자가 논문 작성 시 준수해야 할 포괄적 규정

- ▶ Manuscript Style Guide

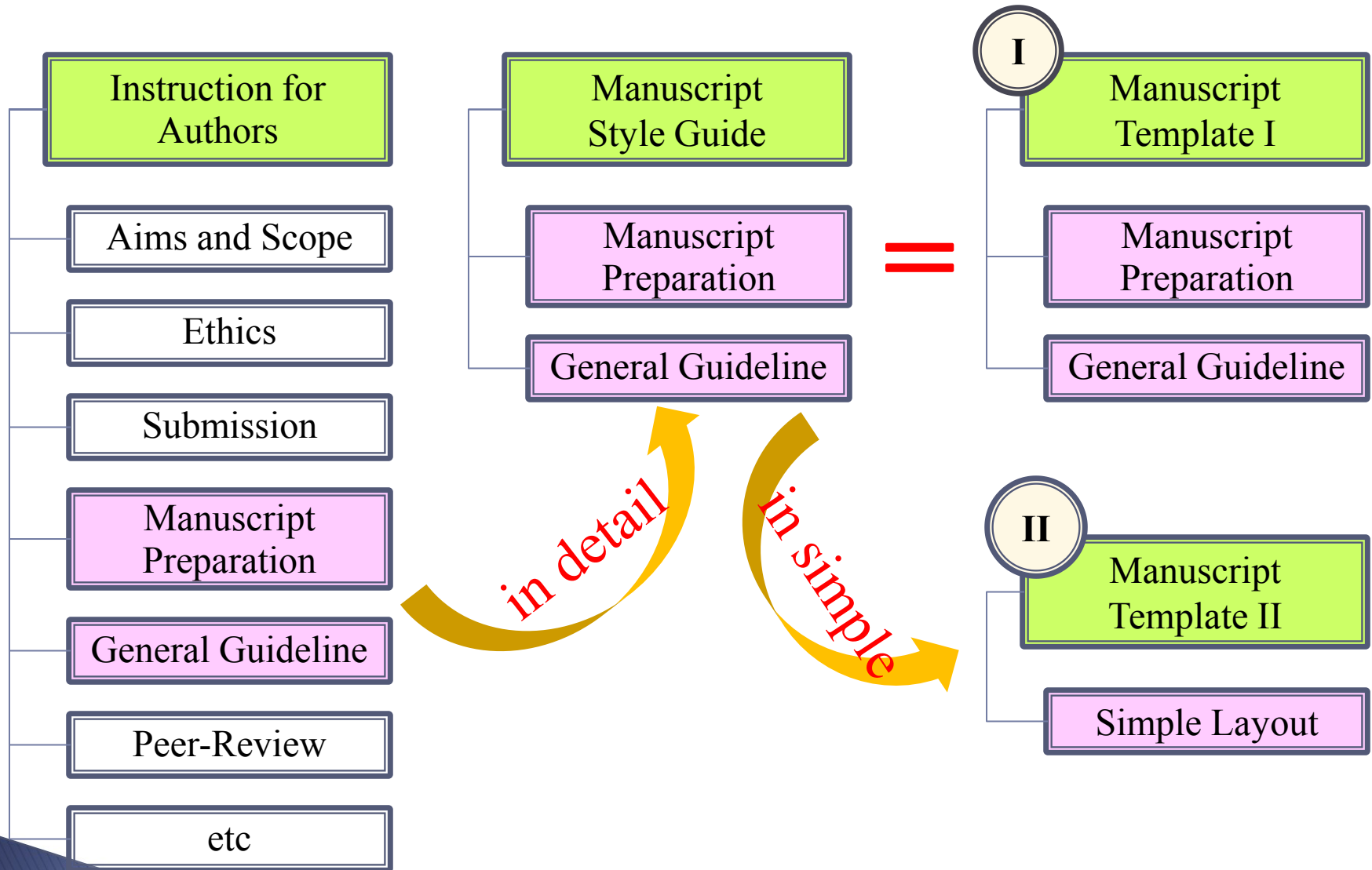
- 논문 형식의 세부적 지침

- ▶ Manuscript Template

- 논문 형식의 세부적 지침

- 형식에 대한 Simple Layout

# Instruction for Authors / Manuscript Style Guide / Manuscript Template



# Manuscript Style Guide 필요성

- ▶ 학술지 형식 체계화의 필수요소
  - 편집의 질을 향상
- ▶ 투고자, 학회, 독자와의 약속
- ▶ 템플릿, 투고규정 보다 세세한 지침
  - 학회지의 style을 구축
- ▶ 간행위(편집위), ME 업무의 간소화
- ▶ 그 외...

# Article 구성

- ▶ 표제지 (title page)
  - 제목(title), 요약제목(running title)
  - 저자(author)
  - 소속기관(affiliation)
  - 교신저자(corresponding author)
  - 진행절차(processing date)
- ▶ 초록(abstract), 중심단어(keyword, index term)
- ▶ 본문(main text)
- ▶ 참고문헌(reference)
- ▶ 표(table), 그림(figure)

# Style

## ▶ 과학기술 관련 학회 style

### ✓ CSE (Council of Science Editors)

- 과학편집인위원회 제안 양식.
- 생물학, 의학 분야

### ✓ ICMJE (International Committee of Medical Journal Editors)

- 국제의학학술지편집인협회의 제안 양식

### ✓ IEEE (Institute of Electrical and Electronics Engineers)

- 미국전기전자학회, 미국국가표준 개발 전문기구, 세계 최대 기술자 단체, 36개의 협회
- 통신, 컴퓨터 부품, 의학, 물리학, 원자물리학 등

### ✓ AMA (American Medical Association)

- 미국의학협회 제안 양식.
- 생의학, 의학, 간호학, 생물학 분야

### ✓ ACS (American Chemical Society)

- 미국화학협회 제안 양식. 화학 분야

### ✓ AIP (American Institute for Physics)

- 미국물리학회 제안 양식. 물리학, 천체물리학, 천문학 분야

### ✓ AMS (American Mathematical Society)

- 미국수학협회 제안 양식. 수학, 전산학 분야

# Title I

- ▶ *American Medical Association Manual of Style: A Guide for Authors and Editors, 10th edition*

*Abbreviations and acronyms cannot be used in the title or pre 'cis. Abbreviations and acronyms must be spelled out the first time they are used in the abstract and again in the body of the manuscript.*

약어, 두문자어 풀이 필수/ 초록, 본문에서도 풀이)

*Capitalize the first letter of each major word in titles and subtitles. Do not capitalize articles (eg, a, an, the), prepositions of 3 or fewer letters, coordinating conjunctions (and, or, for, nor, but), or the to in infinitives. Do capitalize a 2-letter verb, such as Is or Be. Exceptions are made for some expressions, such as compound terms from languages other than English and phrasal verbs:*

대문자: 단어 첫 철자, 2자 동사, 비영어 합성 용어, 구동사

소문자: 관사, 3자 이하 전치사, 등위접속사, to 부정사

- Ethical Questions Surroundings *In Vitro* Fertilization
- Permanent Duplex Surveillance of *In Situ* Saphenous Vein Bypasses
- Choice of Stents and End Points for Treatment of *De Novo* Coronary Artery Lesions
- Weighing In* on Bariatric Surgery
- Researchers *Size Up* Nanotechnology Risks
- Universal Screening *for* Tuberculosis Infection: School's Out!
- We *Do* Need *to* Treat Mild Hypertention

# Title II

## ▶ *IEEE Editorial Style Manual*

*In the paper title, capitalize the first letter of the first and last word and all the nouns, pronouns, adjectives, verbs, adverbs, and subordinating conjunctions (*If, Because, That, Which*). Capitalize abbreviations that are otherwise lowercase (e.g., use DC, not dc or Dc) except for unit abbreviations and acronyms. Articles (*a, an, the*), coordinating conjunctions (*and, but, for, or, nor*), and most short prepositions are lowercase unless they are the first or last word. Prepositions of more than three letters (*Before, Through, With, Without, Versus, Among, Under, Between*) should be capitalized.*

대문자: 단어 첫 철자, 명사, 대명사, 형용사, 동사, 부사, 종속접속사, 약어, 3자 이상 전치사

소문자: 관사, 등위접속사



# Title III

- ▶ ✓ 단어 수 ✓ 약어 풀이 ✓ 대소문자
- ▶ Membrane Biofouling of Seawater Reverse Osmosis Initiated by Sporogenic *Bacillus Strain*
- ▶ Mega-dose vitamin C attenuated lung inflammation in mouse asthma model
- ▶ Oxaliplatin-Induced Chronic Peripheral Neurotoxicity: A Prospective Analysis in Patients with Colorectal Cancer
- ▶ A Connection Entropy-based Multi-Rate Routing Protocol for Mobile Ad Hoc Networks
- ▶ An MRI-Compatible Robotic System With Hybrid Tracking for MRI-Guided Prostate Intervention (IEEE Editorial Style Manual)

# Title III

- ▶ 연결 단어 (Hyphenated compounds)
  - ▶ Prefix, Suffix: Anti-, Intra-, Self-, Pre-, Post-
    - Anti-inflammatory
    - Intra-abdominal
    - Self-referral
    - Pre-operative
  - ▶ A single word
    - Long-term
    - Follow-up
    - Part-time
    - X-ray
  - ▶ Temporary compound, Equal weight
    - Cost-Benefit
    - Low-Level
    - B-Cell
    - Age-Related

# Title IV

- ▶ **Running title / Running head / 난외 표제 / 요약제목**
  - 표제(title) 보다 단어 수에 제약

## An MRI-Compatible Robotic System With Hybrid Tracking for MRI-Guided Prostate Intervention

KRIEGER *et al.*: MRI-COMPATIBLE ROBOTIC SYSTEM WITH HYBRID TRACKING FOR MRI-GUIDED PROSTATE INTERVENTION

3051

clinical system has been successfully used in 37 patient procedures to date. To the best of our knowledge, the APT I system is the only clinically utilized systems for transrectal MRI-guided access to the prostate employing active tracking.

Beyersdorff *et al.* [36] and Engelhard *et al.* [37] reported MRI-guided transrectal needle biopsies in clinical studies with a system (InVivo Germany GmbH, Schwerin, Germany) employing manual alignment and passive tracking of a needle sleeve. Barentsz *et al.* [38] reported phantom studies with an MRI-compatible pneumatically actuated transrectal robot. Elhawary *et al.* reported phantom experiments with a prototype robotic system using piezoceramic motors for transrectal prostate biopsy [39].

2) *Transperineal Approach*: MRI-guided transperineal prostate intervention has been demonstrated in clinical studies inside an open MRI scanner [31] and conventional closed MRI scanner with the use of static needle-guiding

system employing a targeting accuracy of about 5 mm or better could reliably access clinically significant prostate cancer foci.

### III. NOVEL 6-DOF HYBRID TRACKING METHOD

The development of MRI-guided robotic intervention instruments is complicated by the need to track in real time the pose (i.e. position and orientation) of these instruments within the MRI scanner. This section reviews previously reported tracking methods and reports the design and performance of the proposed hybrid tracking method.

#### A. Previously Reported Tracking Methods

Previously reported approaches for tracking of robotic and manual instruments within MRI scanners are as follows:

1) *Joint Encoder Tracking*: In this approach, the pose of the intervention device (e.g. needle or other surgical device) is

## Zinc-Citrate Compound in Bladder Cancer

and coupled ATP production. Because zinc is the key to the metabolic transformation of the cell, the important issue becomes the mechanism of normal epithelial cell accumulation of high zinc levels and the mechanism for lost ability of malignant cells to accumulate zinc levels. In prostate cancer, the zinc transporter named ZIP1 is responsible for zinc uptake and accumulation. However, there have been no reports about the process by which zinc enters into a cell and the intracellular signaling pathway in MBT-2. However, the results of the present study revealed that treatment with the zinc-citrate compound raised the intracellular zinc level in MBT-2 cells and had an anti-proliferative effect. This finding showed that exposure to the zinc-citrate compound increased the intracellular zinc level and its intracellular effect, even though the process by which zinc entered the cells was not determined.

P21<sup>WAF1</sup> is a tumor suppressor protein that not only acts on cell cycle progression but also increases apoptosis

## CONCLUSIONS

This study found that the zinc-citrate compound hindered the growth of bladder cancer cells and induced apoptosis. Although many studies have shown the correlation and the effect of the zinc-citrate compound on various types of cancer, there have been no reports for bladder cancer. The results of this study to be meaningful for determining the mechanism of bladder cancer cells.

Because this study had the limitations of an *in vivo* study but an experimental study, further effort is necessary in the future to study the effects of zinc and its clinical application. Studies on the interaction of zinc with other drugs used for bladder cancer by their use are also needed. This study may be a new clue to these future

## INTRODUCTION

According to GLOBOCAN 2008 reported by Ferlay et al. [1], bladder cancer incidence ranked fourth and bladder cancer mortality ranked seventh in developed countries. Although bladder cancer can be treated with surgery, intravesical chemotherapy, and systemic chemotherapy in most cases, it is hard to delay the progression of the cancer despite an appropriate treatment strategy. In particular, superficial bladder cancer accounts for 70% of the total cases of bladder cancer and tends to progress to muscle-invasive cancer even after proper treatment [2,3].

Zinc has antioxidant, antiinflammatory, and proapoptotic activity and plays a role in genetic stability and function [4,5]. Studies in an ovarian cancer cell line and choriocarcinoma cells have suggested that zinc can induce

the apoptosis of cancer cells [6]. The apoptogenic effect of zinc through the interaction between normal and cancer cells has also been conducted [8]. Citrate, which is involved in the Krebs cycle, has been reported to bind with heavy metals by binding to binding with zinc it may increase the apoptosis [9].

In the present study, we aimed to study the proliferative activity of a zinc-citrate compound in a bladder cancer cell line and to investigate its mechanism of action.

hypovolemia, anemia, hypotension, and hyperthermia should be avoided. Of these, continuous hyperventilation is especially injurious to the brain. Surgeons must repeatedly check the status of anesthesia, especially the level of PaCO<sub>2</sub>, during the operation.

After induction of anesthesia, the course of the parietal branch of the STA is palpated or traced with a Doppler device and is marked. When the STA cannot be palpated or traced, insertion of galeal tissue without the STA is a good alternative in pediatric MMD cases.

If the operation is combined with simultaneous bifrontal EGS, both areas are prepared. The scalp layer is superficially cut to the layer of galeal tissue where the STA is located. The galeal tissue is harvested with anterior and posterior galeal incisions parallel to the STA as wide as the segment that is to be inserted onto the brain. The continuity of the STA should be preserved. Even in cases where the STA is injured, however, neovascularization is frequently satisfactory in pediatric cases.

the donor tissue and the brain surface is of significant distance. To minimize CSF leak through the area around the proximal and distal ends of the STA, pieces of Gelfoam are used to pack the gaps.

The bone flap is replaced. Attention is given to preventing compression of the proximal and distal ends of the STA and the galeal tissue by the bone margins. When the brain is atrophic, the bone flap may be left floating to promote contact between the donor tissue and the brain surface. The depressed skull flap becomes less prominent as the child grows older.

The scalp layers are closed in the usual fashion. As described earlier, the precise development of collaterals through the cranial bone causes oozing of blood in the subdural and epidural spaces. Meticulous hemostasis with dural tenting (including the central portion of the bone flap) and placement of a drainage catheter into the epifascial or epidural space is helpful. To promote healthy healing of the less vascularized portion of the remaining scalp tissue, meticulous

## Operation

arteries and cerebral cortical arteries) or indirect (insertion of a scalp or muscle layer onto the surface of the brain to promote ingrowth of blood vessels into the ischemic brain) revascularization method, or a combination of both is performed to increase the cerebral blood flow (CBF). In children, direct revascularization is frequently technically not feasible, whereas the response to indirect revascularization is excellent, although 1 or 2 weeks are required for stabilization of symptoms. In contrast, in adults, the increase in CBF achieved by indirect revascularization is often unsatisfactory and direct revascularization is usually feasible. However, a sudden increase of CBF in the brain that has suffered from longstanding chronic severe ischemia may cause hemorrhagic phenomenon and/or neurological deterioration (hyperperfusion syndrome). A combined method may increase the revascularization effect although only to a small extent.

## Surgery

### 1. Types of operation

For direct revascularization, detailed descriptions of intracranial-extracranial arterial bypass such as STA-middle cerebral artery bypass should be referred to. The same procedures used for other causes of cerebral ischemia are applied in MMD. However, sometimes the recipient vessels in MMD are more fragile compared with those found in other diseases.

Various procedures for indirect revascularization surgery can be adapted according to the tissues inserted into the cranial cavity. In the present discussion, representative procedures, STA EDAS, bifrontal encephalogalectomy (EGS), and multiple burr hole trephination are described.

In children, no evident difference in surgical outcome has been noted among the various operative methods, although a slightly better outcome has been reported by "combined" (direct+indirect) surgery. However, because of technical limitations, combined surgery is not widely applied to pediatric MMD<sup>9)</sup>. In adults, the revascularization



# Author I

- ▶ ✓ 국내 저자 영문명 표기 ✓ 학위 사용 여부 ✓ 소속기관 연결표기 ✓ 교신저자 표기 여부
- ▶ 국내 저자 영문명 표기 일반적 유형

Gil Dong Hong / Gil-Dong Hong / Gildong Hong

- ▶ 학위 사용 여부
- ▶ Soon Shin Lee, Gil Dong Hong, Young Hee Kim, **and** Soon Hee Choi
- ▶ Soon Shin Lee, **MD**, Gil Dong Hong, **MD**, Young Hee Kim, **MS**, Soon Hee Choi, **MD**
- ▶ Soon Shin Lee, **MD, PhD**, Gil Dong Hong, **MD, PhD**, Soon Hee Choi, **MD, PhD**
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# Author II

- ▶ 학위 사용 여부 (AMA)

- 저널마다 서로 다른 정책

- JAMA and Archives Journal의 경우

- 최고 학위나 전문 자격을 표기

- 박사 학위가 두 개일 경우 (e.g., MD, PhD)

- 박사와 석사의 분야가 다를 경우 (e.g., MD, MPH)

- 석사 이하는 표기하지 않음.

- 단, 특수분야 전문자격이나 학위 (e.g., RN, RD, COT, PA)

- 전문화된 학사학위(e.g., BSN, Bpharm), 통합학위(e.g., BS, M[ASCPI])는 표기

- Fellowship designations (e.g., FACP or FACS) and honorary degrees (eg, PhD[Hon]) 생략

- 군인 또는 퇴역군인은 군 지위 보다는 학위 기재

# Author II

New England Journal of Medicine

## *The* NEW ENGLAND JOURNAL *of* MEDICINE

ESTABLISHED IN 1812

AUGUST 16, 2012

VOL. 367 NO. 7

### Quality-of-Life Effects of Prostate-Specific Antigen Screening

Eveline A.M. Heijnsdijk, Ph.D., Elisabeth M. Wever, M.Sc., Anssi Auvinen, M.D., Jonas Hugosson, M.D., Stefano Ciatto, M.D.,\* Vera Nelen, M.D., Maciej Kwiatkowski, M.D., Arnauld Villers, M.D., Alvaro Páez, M.D., Sue M. Moss, Ph.D., Marco Zappa, M.D., Teuvo L.J. Tammela, M.D., Tuukka Mäkinen, M.D., Sigrid Carlsson, M.D., Ida J. Korfage, Ph.D., Marie-Louise Essink-Bot, Ph.D., Suzie J. Otto, Ph.D., Gerrit Draisma, Ph.D., Chris H. Bangma, M.D., Monique J. Roobol, Ph.D., Fritz H. Schröder, M.D., and Harry J. de Koning, M.D.

ABSTRACT

# Computer-Assisted Sleep Staging

Rajeev Agarwal\* and Jean Gotman

**Abstract**—To address the subjectivity in manual scoring of polysomnograms, a computer-assisted sleep staging method is presented in this paper. The method uses the principles of segmentation and self-organization (clustering) based on primitive sleep-related features to find the pseudonatural stages present in the record. Sample epochs of these natural stages are presented to the user, who can classify them according to the Rechtschaffen and Kales (RK) or any other standard. The method then learns from these samples to complete the classification. This step allows the active participation of the operator in order to customize the staging to his/her preferences. The method was developed and tested using 12 records of varying types (normal, abnormal, male, female, varying age groups). Results showed an overall concurrence of 80.6% with manual scoring of 20-s epochs according to RK standard. The greatest amount of errors occurred in the identification of the highly transitional Stage 1, 54% of which was

sleep to deep sleep, the artificial demarcation of sleep stages by the RK classification is a simplification. Characterization of sleep in terms of these discrete stages is a methodological concept that attempts to standardize analysis across reviewers and laboratories; it is not a biological fact [2]. The exact time of change of state is highly subjective and leaves room for interpretation by the scorer, who will score transitional epochs (e.g., Stage 1 and Stage 3) differently on different occasions [3]. Studies have shown interscorer agreement ranging from 67% to 91% [4]–[7] depending on different scoring epoch lengths and number of readers. Visual scoring of two healthy subjects in ten laboratories in Japan showed 67%–75.3% agreement [7]. Most data on interscorer agreement are based on the study of normal



# Author II

## Science

### PERSPECTIVES

#### PLANT SCIENCE

## Plant Gene Clusters and Opiates

Dean DellaPenna<sup>1</sup> and Sarah E. O'Connor<sup>2,3</sup>

Plant natural products have a profound impact on human health and are prime targets for drug development, but full realization of their clinical potential is often curtailed because these compounds are typically produced in small amounts in slow-growing plant species. Improving production levels is essential for bringing new plant compounds into the drug development pipeline, but such improvements demand an understanding of the fundamental biological processes underlying complex natural product synthesis in plants. On page 1704 of this issue, Winzer *et al.* (1) define genes encod-

A variety of poppy that produces high amounts of an alkaloid opiate requires a cluster of genes that encode key biosynthetic enzymes.

Plant species	Compound produced	Compound class	Likely function in host plant
<i>Lotus japonicus</i>	Linamarin	Cyanogenic glycoside	Herbivore defense
<i>Manihot esculenta</i>	Linamarin	Cyanogenic glycoside	Herbivore defense
<i>Sorghum bicolor</i>	Dhurrin	Cyanogenic glycoside	Herbivore defense
<i>Zea mays</i>	DIMBOA	Cyclic hydroxamic acid	Insect and microbial defense
<i>Avena sativa</i>	Avenacin A-1	Triterpene saponin	Antifungal
<i>Oryza sativa</i>	Phytocassane A	Diterpene phytoalexin	Antifungal
<i>Oryza sativa</i>	Momilactone A	Diterpene phytoalexin	Antifungal

# Author II

Nature

## ARTICLE

doi:10.1038/nature11244

# Embryonic stem cell potency fluctuates with endogenous retrovirus activity

Todd S. Macfarlan<sup>1†</sup>, Wesley D. Gifford<sup>1</sup>, Shawn Driscoll<sup>1</sup>, Karen Lettieri<sup>1</sup>, Helen M. Rowe<sup>2</sup>, Dario Bonanomi<sup>1</sup>, Amy Firth<sup>3</sup>, Oded Singer<sup>3</sup>, Didier Trono<sup>2</sup> & Samuel L. Pfaff<sup>1</sup>

Embryonic stem (ES) cells are derived from blastocyst-stage embryos and are thought to be functionally equivalent to the inner cell mass, which lacks the ability to produce all extraembryonic tissues. Here we identify a rare transient cell population within mouse ES and induced pluripotent stem (iPS) cell cultures that expresses high levels of transcripts found in two-cell (2C) embryos in which the blastomeres are totipotent. We genetically tagged these 2C-like ES cells and

# Author II

## Biochemistry

### CHAPTER 3

71

## Non-Random Patterns of Membrane Proteins and Their Roles in Transmembrane Signaling

ANDREA BODNÁR, GYÖRGY VÁMOSI, KATALIN TÓTH, ATTILA JENEI,  
LÁSZLÓ MÁTYUS, SÁNDOR DAMJANOVICH

### 3.1 Introduction

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# Abstract

- ▶ ✓ 단어 수 ✓ section별 줄 바꿈 ✓ 약어 사용 여부 ✓ 참고문헌, 표, 그림 인용 자제 ✓ 시약, 의료기기 표기 범위

- ▶ **IEEE Editorial Style Manual**

*Every published paper must contain an Abstract. Abstracts appear in text in boldface type. By nature, **Abstracts shall not contain numbered mathematical equations or numbered references.***

- ▶ 논문의 유형에 따른 일반적 형식
  - Structured format: section heading**  
Purpose (Backgroud)/Methods/Results/Conclusion(s)
  - Unstructured or narrative format**  
Section heading 없이 서술형 문장

# Keywords / Index term

- ▶ ✓ 단어 수 ✓ 지정 용어 (e.g., MeSH) 사용 여부 ✓ 대소문자 ✓ 단어별 구분기호 ([,], [;]), ✓ 배열 순서 (알파벳순), ✓ 글자체
- ▶ Keywords: Spinal cord injuries; Urinary bladder; Alpha adrenergic receptors
- ▶ *Key Words: Laparoscopy; Minimally invasive surgical procedures; Robotics*
- ▶ Key Words: Thyroid neoplasms, Thyroidectomy, Hypocalcemia, Parathyroid glands
- ▶ **Medical Subject Heading (MeSH):** <http://www.ncbi.nlm.nih.gov/mesh>
- ▶ **IEEE Editorial Style Manual (Index term)**

*All papers must contain Index Terms as provided by the authors. A list of keywords is available by sending a blank email to [keywords@ieee.org](mailto:keywords@ieee.org). Index Terms appear in boldface type as in the Abstract, in alphabetical order, and as a final paragraph of the Abstract. Acronyms are defined in Index Terms if they are defined in the paper. ([http://www.ieee.org/organizations/pubs/ani\\_prod/keywrd98.txt](http://www.ieee.org/organizations/pubs/ani_prod/keywrd98.txt))*

# Keywords / Index term

Medical Subject Heading (MeSH): <http://www.ncbi.nlm.nih.gov/mesh>

The screenshot displays the MeSH (Medical Subject Headings) website interface. The top navigation bar includes links for NCBI, Resources, and How To. The main search area shows the MeSH dropdown menu, the search term 'cancer', and a Search button. Below the search bar, there is a banner image of a forest and a text box stating: "MeSH (Medical Subject Headings) is the NLM controlled vocabulary thesaurus used for indexing articles for PubMed."

The search results page shows the following details:

- Display Settings:** Summary, 20 per page
- Results:** 1 to 20 of 319
- Send to:** PubMed search builder
- Find related data:** Database: Select
- Search details:** "neoplasms"[MeSH Terms] OR cancer[Text Word]

The search results list includes the following items:

- Neoplasms**  
1. New abnormal growth of tissue. Malignant **neoplasms** show a greater degree of anaplasia and have the properties of invasion and metastasis, compared to benign **neoplasms**.  
Year introduced: /diagnosis was NEOPLASM DIAGNOSIS 1964-1965
- Early Detection of Cancer**  
2. Methods to identify and characterize **cancer** in the early stages of disease and predict tumor behavior.  
Year introduced: 2009
- Cancer Care Facilities**  
3. Institutions specializing in the care of **cancer** patients.  
Year introduced: 1991(Aug 1977)
- American Cancer Society**  
4. A voluntary organization concerned with the prevention and treatment of **cancer** through education and research.  
Year introduced: 1991(1975)
- Chemotherapy, Cancer, Regional Perfusion**  
5. Neoplasm drug therapy involving an extracorporeal circuit with temporary exclusion of the tumor-bearing area from the general circulation during which high concentrations of the drug are perfused to the isolated part.

# Keywords / Index term

## IEEE Editorial Style Manual (Index term):

[http://www.ieee.org/organizations/pubs/ani\\_prod/keywrd98.txt](http://www.ieee.org/organizations/pubs/ani_prod/keywrd98.txt)

## 2009 IEEE Taxonomy

Version 1.01

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### IEEE Taxonomy: A Subset Hierarchical Display of IEEE Thesaurus Terms

The IEEE Taxonomy comprises the first three hierarchical 'levels' under each term-family (or branch) that is formed from the top-most terms of the IEEE Thesaurus. In this document these term-families are arranged alphabetically and denoted by **boldface** type. Each term family's hierarchy goes to no more than three sublevels, denoted by indents (grouping of four dots) preceding the next level terms. A term can appear in more than one hierarchical branch and can appear more than once in any particular hierarchy. The IEEE Taxonomy is defined in this way so that it is always a subset of the IEEE Thesaurus.

#### **Aerospace and electronic systems**

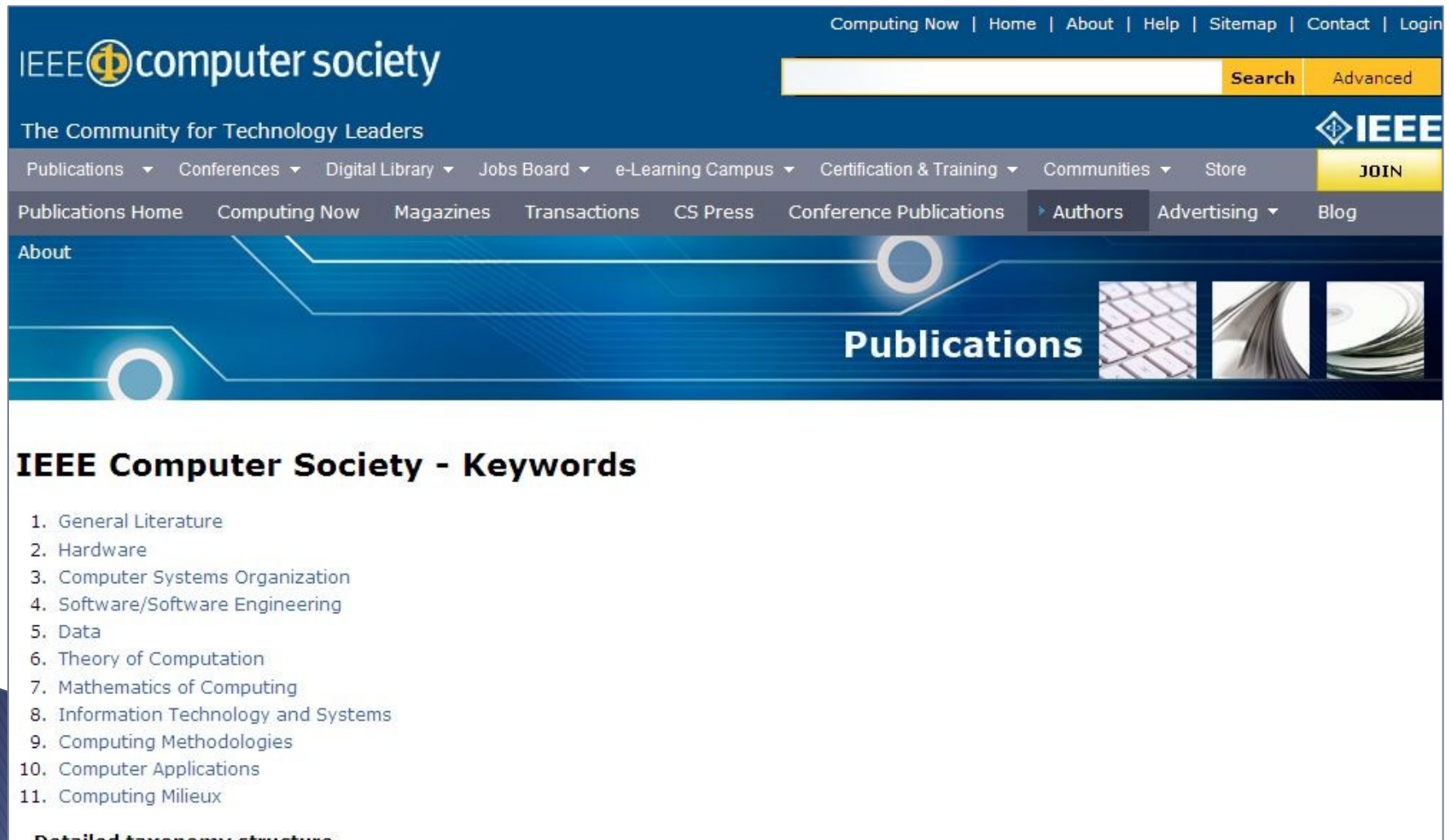
....Aerospace control	.....Multistatic radar
.....Air traffic control	.....MIMO radar
.....Attitude control	.....Passive radar
.....Ground support	.....Radar applications
....Aerospace engineering	.....Radar countermeasures
.....Aerospace biophysics	.....Radar detection
.....Aerospace electronics	.....Radar imaging
.....Aerospace safety	.....Radar measurements
.....Air safety	.....Radar polarimetry
....Aerospace simulation	.....Radar remote sensing
.....Aerospace testing	.....Radar tracking
.....Satellites	.....Radar clutter
	.....Radar cross section



# Keywords / Index term

## IEEE Computer society (Keywords):

<http://www.computer.org/portal/web/publications/acmtaxonomy>



The screenshot shows the IEEE Computer Society website. The header includes the IEEE logo and the text "IEEE computer society". Below the header is a navigation bar with links: Computing Now, Home, About, Help, Sitemap, Contact, Login. A search bar is also present. The main content area is titled "Publications" and features a list of keywords under the heading "IEEE Computer Society - Keywords".

IEEE computer society

The Community for Technology Leaders

Publications Conferences Digital Library Jobs Board e-Learning Campus Certification & Training Communities Store

Publications Home Computing Now Magazines Transactions CS Press Conference Publications Authors Advertising Blog

About

Publications

### IEEE Computer Society - Keywords

1. General Literature
2. Hardware
3. Computer Systems Organization
4. Software/Software Engineering
5. Data
6. Theory of Computation
7. Mathematics of Computing
8. Information Technology and Systems
9. Computing Methodologies
10. Computer Applications
11. Computing Milieux

Detailed taxonomy structure

# Abstracts & Keywords I

**Purpose:** The anterior region is a challenge for most clinicians to achieve optimal esthetics with dental implants. The provisional crown is a key factor in the success of obtaining pink esthetics around restorations with single implants, by soft tissue and inter-proximal papilla shaping. Provisional abutments bring additional costs and make the treatment more expensive. Since one of the aims of the clinician is to reduce costs and find more economic ways to raise patient satisfaction, this paper describes a practical method for chair-side fabrication of non-occlusal loaded provisional crowns used by the authors for several years successfully.

**Methods:** Twenty two patients (9 males, 13 females; mean age, 36,72 years) with one missing anterior tooth were treated by using the presented method. Metal definitive abutments instead of provisional abutments were used and provisional crowns were fabricated on the definitive abutments for all of the patients. The marginal fit was finished on a laboratory analogue and temporarily cemented to the abutments. The marginal adaptation of the crowns was evaluated radiographically.

**Results:** The patients were all satisfied with the final appearance and no complications occurred until the implants were loaded with permanent restorations.

**Conclusions:** The use of the definitive abutments for provisional crowns instead of provisional abutments reduces the costs and the same results can be obtained.

**Keywords:** Dental abutments, Dental implants, Dental marginal adaptation, Dental prosthesis.



# Abstracts & Keywords II

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Circadian clocks are the endogenous oscillators that harmonize a variety of physiological processes within the body. Although many urinary functions exhibit clear daily or circadian variation in diurnal humans and nocturnal rodents, the precise mechanisms of these variations are as yet unclear. In this review, we briefly introduce circadian clocks and their organization in mammals. We then summarize known daily or circadian variations in urinary function. Importantly, recent findings by others as well as results obtained by us suggest an active role of circadian clock genes in various urinary functions. Finally, we discuss possible research avenues for the circadian control of urinary function.

**Keywords:** Circadian clocks; Urinary bladder; Urination; Urinary function

---

**Purpose:** Although several reports have been published regarding the coexistence of hyperparathyroidism and papillary thyroid carcinomas, concurrence of parathyroid adenoma and papillary thyroid carcinoma is extremely rare. The aim of this study was to describe experiences with concurrent parathyroid adenoma and papillary thyroid carcinoma. **Methods:** Seven patients with concurrent parathyroid adenoma and papillary thyroid carcinoma were identified between January 2006 and December 2007, and their medical records were reviewed retrospectively. **Results:** Of the seven patients identified, three were male and four were female; their mean age was 53.6 years. None of the patients presented with symptomatic hyperparathyroidism preoperatively. On laboratory findings, four patients had mild to moderate hypercalcemia, but serum parathyroid hormone concentrations were high in all patients. Preoperative imaging showed suspicious features of diseased parathyroid glands in four patients; two upon ultrasonography and computed tomography together and two upon ultrasonography only. The coexistence of parathyroid adenoma did not affect the extent of thyroid surgery. Laboratory values after surgery returned to within normal ranges in all patients. **Conclusion:** It is important not only to analyze serum calcium levels but also to carefully interpret imaging studies in order to identify asymptomatic hyperparathyroidism when performing thyroid cancer surgery.

**Key Words:** Parathyroid neoplasms, Papillary thyroid cancer



# Abstracts & Keywords III

## Dependence of Induced Transmembrane Potential on Cell Density, Arrangement, and Cell Position Inside a Cell System

Mojca Pavlin, Nataša Pavšelj, and Damijan Miklavčič\*

**Abstract**—A nonuniform transmembrane potential (TMP) is induced on a cell membrane exposed to external electric field. If the induced TMP is above the threshold value, cell membrane becomes permeabilized in a reversible process called electroporation. Studying electric potential distribution on the cell membrane gives us an insight into the effects of the electric field on cells and tissues. Since cells are always surrounded by other cells, we studied how their interactions influence the induced TMP. In the first part of our study, we studied dependence of potential distribution on cell arrangement and density in infinite cell suspensions where cells were organized into simple-cubic, body-centered cubic, and face-centered cubic lattice. In the second part of the study, we examined how induced TMP on a cell membrane is dependent on its position inside a three-dimensional cell cluster. Finally, the results for cells inside the cluster were compared to those in infinite lattice. We used numerical analysis for the study, specifically the finite-element method (FEM). The results for infinite cell suspensions show that the induced TMP depends on both: cell volume fraction and cell arrangement. We established from the results for finite volume cell clusters and layers, that there is no radial dependence of induced TMP for cells inside the cluster.

**Index Terms**—Cell cluster, cell suspension, electroporation, finite-element modeling, transmembrane potential.

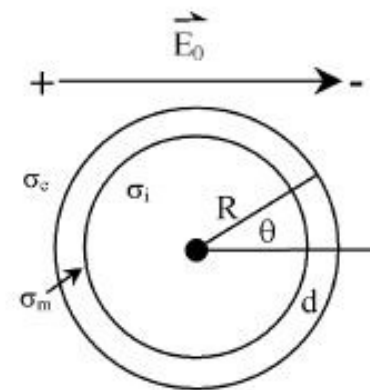


Fig. 1. Model of a cell, where  $\sigma_e$ ,  $\sigma_i$  and  $\sigma_m$  represent specific conductivities of external medium, internal medium and cell membrane, respectively,  $\theta$  is an angle measured with respect to the electric field direction ( $E_0$ ),  $R$  denotes cell radius and  $d$  membrane thickness.

dergoing fusion, models of cardiac tissue response to defibrillating currents, and the study of potential health effects of electric and magnetic fields [6], [7]. Therefore, investigation of induced potential distribution on the cell membrane is important in studying the effects of the electric field on biological cells.

Potential distribution on the surface of a cell placed in an

# Main text I

✓ 논문 유형별 Section heading 순서 ✓ Heading 대소문자 ✓ Heading 순서 표기

## ▶ Structured format

INTRODUCTION / (MATERIALS AND) METHODS / RESULTS / DISCUSSION /  
(CONFLICT[S] OF INTEREST) / (ACKNOWLEDGMENT[S])

Introduction / Case Report(s) (Case 1, Case 2...) / Discussion / (Conflict[s]  
of interest) / (Acknowledgment[s])

I. INTRODUCTION / (II. SYSTEM DESIGN) / III. (EXPERIMENTAL)  
METHODS / IV. RESULTS / V. DISCUSSION / VI. CONCLUSION

# Main text II

## ▶ Unstructured format

(INTRODUCTION) / 본문에서 제목 도출 (BODY TEXT) / (CONFLICT[S]  
OF INTEREST) / (ACKNOWLEDGEMENT[S])

✓ Section heading (Primary/Secondary/Tertiary/Quaternary) 체계  
(대소문자, 이탤릭체, 번호 순서 등)

Primary	Materials and Methods	MATERIALS AND METHODS
Secondary	1. Methods	Methods
Tertiary	1) <i>Patient</i>	<i>Patient</i>

# Main text III

- ▶ **IEEE Editorial Style Manual**

- ▶ **Primary Heading** ...Roman numerals and centered above the text.

I. INTRODUCTION / II. METHODS / III. RESULTS AND DISCUSSION / IV. CONCLUSION / APPENDIX / ACKNOWLEDGMENT

- ▶ **Secondary Heading** ...capital letters followed by followed by periods, flush left, upper and lower case, and italic.

A. Ultrasound-Guided Prostate Intervention / B. Case for MRI-Guided Prostate Intervention...

- ▶ **Tertiary Heading** ...Arabic numerals followed by parentheses. They are indented one em, and run into the text in their sections, italic, upper and lower case, and followed by a colon.

1) Transrectal Approach: / 2) Transperineal Approach:...

- ▶ **Quaternary Heading** ...identical to tertiary headings, except that they are indented two ems.



# Main text III

## Structured format: original article

### Introduction

The pandemic influenza A/H1N1 viral infection was first identified in March 2009<sup>3</sup>; this virus was antigenically and genetically unrelated to human seasonal influenza viruses, but genetically related to viruses known to circulate in swine<sup>2</sup>. The world experienced its first wave of pandemic influenza A/H1N1 activity in the spring of 2009, followed by a second wave in the fall, peaking at the end of October. An early report on 18 hospitalized patients who were victims of the initial outbreak in Mexico showed that the pandemic H1N1 2009 virus caused severe illness and death in previously healthy young to middle-aged individuals; it has since been noted that the majority of patients continue to experience mild illness<sup>1</sup>.

There have been a few reports of H1N1 characteristics and outcomes among children hospitalized with pandemic influenza A/H1N1 2009 viral infection<sup>3,4</sup>. Although children are considered to be more vulnerable to pandemic influenza pneumonia, few reports describe the characteristics of this pneumonia in pediatric patients<sup>5,6</sup>. This study describes the clinical and epidemiologic features of the viral infection among pediatric patients hospitalized with pandemic influenza A/H1N1 pneumonia from September 2009 to February 2010 at a tertiary medical center in Korea.

### Materials and methods

We reviewed the medical charts and radiologic and laboratory

### 1. Microbiological studies

Nasopharyngeal swab specimens (Flexible Minitip 503CS01 Flock Swabs, Diagnostic Hybrids, Athens, OH, USA) were collected at admission. Specimens were placed in 3 MI Universal Transport Medium (Diagnostic Hybrids) and kept at 2 to 4°C. RT-PCR testing was done in accordance with published guidelines from the U.S. Centers for Disease Control and Prevention.

### 2. Statistical analysis

We compared data between patients with pandemic H1N1 pneumonia and those with pandemic H1N1 infection without pneumonia. Logistic regression was used to identify the characteristics of the children in each group. The Fisher's exact test was used to compare categorical variables. Statistical analysis was performed with the SPSS ver. 16.0 (SPSS Inc., Chicago, IL, USA). A *P* value of less than 0.05 indicated a significant difference.

## Results

### 1. Patient characteristics

In our institution, 11,662 pediatric patients (all under 18 years of age) were tested for pandemic influenza A/H1N1 2009 from September 2009 to February 2010 (Table 1). Among them, 5,367 patients (46%) tested positive; 72 of the 5,367 patients were admitted to the hospital, and 54 of these 72 patients had pandemic influenza A/H1N1 pneumonia confirmed by means of RT-PCR (Table 2).

increase in intra-abdominal pressure [14].

Water exercise including swimming is a common strategy in physical medicine and rehabilitation [15]. When exercising in water, buoyancy supports the body to reduce the vertical load

## MATERIALS AND METHODS

### Animals

Adult female Sprague-Dawley rats weighing  $240 \pm 5$  g (9 weeks old) were obtained from a commercial breeder (Orient Co., Seoul, Korea) for the experiment. The experimental procedures were performed in accordance with the animal care guidelines of the National Institutes of Health and the Korean Academy of Medical Sciences. The animals were housed under controlled temperature ( $23 \pm 2^\circ\text{C}$ ) and lighting (12 hours of light: 0800–2000 hours) conditions and were supplied with food and water ad libitum before and after the surgery. The rats were randomly divided into three groups ( $n = 6$  in each group): the sham-operation group, the transabdominal urethrolisis-induced group, and the transabdominal urethrolisis-induced and swimming group.

### Surgical Induction of SUI

To induce SUI, transabdominal urethrolisis was performed as previously described [2]. The rats were anesthetized with Zoletil 50 anesthesia (10 mg/kg, i.p.; Virbac Laboratories, Carros, France). After an abdominal incision was made, the bladder and the urethra were detached from surrounding tissues and nerves, and the urethra was detached from the anterior pubic bone. A cotton-tip swab was put into the vagina to aid with the dissection. In the sham operation group, an abdominal incision was made, but the urethra was not detached.

### Swimming Protocol

The swimming exercise was performed according to the manufacturer's protocol [18]. The rats in the swimming group were

# Main text III

## Structured format: case report

### INTRODUCTION

Splenic infarction is a relatively uncommon diagnosis and this clinical presentation can mimic other causes of acute abdominal pain. Splenic infarction occurs as a consequence of systemic embolism, most commonly associated with several cardiovascular conditions, such as atrial fibrillation, in a patient with celiac axis stenosis. Splenic infarction can also occur in the setting of any etiological process leading to splenic infarction. The clinical situation should be considered as a differential diagnosis of acute abdominal pain.

### CASE REPORT

We present an unusual case of splenic infarction in a 53-year-old male without any etiological factors. A fifty-three-year-old male patient was admitted to our hospital

the extraction socket is also problematic, especially in the posterior area. Various techniques and materials have been developed and used to enhance bone formation and osseointegration within these sockets at the time of implant placement. The gap problem is relatively easily solved by filling the gap with graft materials and applying a membrane. Although small peri-implant bone defects can be completely healed without using guided bone regeneration (GBR) procedures [1], gaps exceeding 2 mm need to be grafted [2,3].

As stated above, one of the problems encountered is insufficient soft tissue to completely cover the GBR site, which usually makes it necessary to perform primary closure of the socket in order to protect the healing site from the oral environment. The use of bioabsorbable and nonabsorbable membranes usually necessitates primary closure over the socket, a requirement that increases surgical complexity. Moreover, although it is considered advisable to use a pedicled flap or a connective-tissue graft to achieve primary closure, this technique is not easy and is uncomfortable for the patient.

### CASE DESCRIPTION

#### Tooth extraction and site assessment

After local anesthesia, the teeth were gently extracted and extreme care was taken to avoid fracture of the socket walls. The tooth was extracted using a #15C blade both mesially and distally to ensure that this was accomplished as atraumatically as possible. The height of the available remaining alveolar bone for implant insertion above the extraction socket apex was estimated by panoramic radiograph whilst accounting for an average X-ray magnification of 30%. The width of the extraction socket was measured with a calibrated periodontal probe intraorally in the mesiodistal and labio-palatal directions.

#### Dental implant placement and GBR

After thoroughly cleaning the extraction socket with curettes, the implants were placed in the optimal three-dimensional position. At least 2 mm of the implant must be inserted



# Main text III

## Structured format

the only clinically utilized systems for transrectal MRI-guided access to the prostate employing active tracking.

Beyersdorff *et al.* [36] and Engelhard *et al.* [37] reported MRI-guided transrectal needle biopsies in clinical studies with a system (InVivo Germany GmbH, Schwerin, Germany) employing manual alignment and passive tracking of a needle sleeve. Barentsz *et al.* [38] reported phantom studies with an MRI-compatible pneumatically actuated transrectal robot. Elhawary *et al.* reported phantom experiments with a prototype robotic system using piezoceramic motors for transrectal prostate biopsy [39].

2) *Transperineal Approach:* MRI-guided transperineal prostate intervention has been demonstrated in clinical studies inside an open MRI scanner [31] and conventional closed MRI scanner with the use of static needle-guiding templates [40]. A surgical assistant robot reported by Chinzei *et al.* [41] was adapted to assist transperineal intraprostatic needle placement [42]. Tadakuma *et al.* reported the use of dielectric elastomer actuators in a preclinical prototype MRI-compatible robot for transperineal needle placement in the prostate [43], [44]. Stoianovici *et al.* reported phantom experiments with a pneumatically actuated device for transperineal brachytherapy seed placement [45]. In [46] and [47] the authors reported the development of a device with a pneumatically actuated needle guide and manual needle

### III. NOVEL 6-DOF HYBRID TRACKING METHOD

The development of MRI-guided robotic intervention instruments is complicated by the need to track in real time the pose (i.e. position and orientation) of these instruments within the MRI scanner. This section reviews previously reported tracking methods and reports the design and performance of the proposed hybrid tracking method.

#### A. Previously Reported Tracking Methods

Previously reported approaches for tracking of robotic and manual instruments within MRI scanners are as follows:

1) *Joint Encoder Tracking:* In this approach, the pose of the intervention device (e.g. needle or other surgical device) is determined by joint encoders at the device's articulated joints [41], [56], [57]. This approach requires the addition of a custom rigid mechanical mounting system to the MRI scanner, and a precise precalibration of the device with respect to the scanner coordinate system.

2) *Passive MRI Fiducial Feature Tracking:* In this approach, the pose of the intervention device is determined by localizing passive fiducial markers embedded within the device. Susil *et al.* developed a passive needle guiding template for transperineal MRI-guided prostate brachytherapy, where the template

# Main text III

## Unstructured format: review article

literature on factors predisposing infants to NEC and strategies for its prevention and management.

### Pathogenesis

#### 1. Intestinal immaturity

An underdeveloped gastrointestinal tract in preterm infants may trigger the development of NEC. Decreased intestinal peristalsis may result in extended exposure of the intestinal epithelium to noxious substances. Immature mucus coatings and incompletely formed tight junctions also contribute to disease pathogenesis<sup>5,6</sup>. Additionally, the gastrointestinal tract's immunological functions are too immature in preterm infants to adequately respond to colonization by pathogenic bacteria<sup>7</sup>. For example, Toll-like Receptor-4 expression is down-regulated in the mature intestinal epithelium upon stimulation by gram-negative lipopolysaccharide but is increased in the immature intestinal epithelium, eliciting an exaggerated pro-inflammatory response through up-regulation of the NF- $\kappa$ B pathway<sup>8,9</sup>.

#### 2. Infection and colonization by pathogenic bacteria

Prolonged antibiotic exposure is associated with an increased risk of NEC. This association persisted in multivariate analyses that excluded confounding factors, such as gestational age, birth weight, and sepsis<sup>10</sup>. Prolonged antibiotic exposure may not only delay beneficial colonization by normal gastrointestinal flora, but may also

it is suggested that severe anemia results in insufficient oxygen to meet the increased requirements of mesenteric vessels after enteral feeding. RBC transfusion may also interrupt the mesenteric vascular tone via an imbalance of nitric oxide and endothelin-1, stimulating the production of pro-inflammatory cytokines as occurs during multiple organ failure<sup>22</sup>. Recently, several in vitro studies have reported that sensitization to cow milk proteins may be involved in NEC pathogenesis<sup>23,24</sup>. At present, however, data are insufficient to determine the involvement of these factors in the pathogenesis of NEC.

### Preventive strategies

#### 1. Enteral feeding strategies

Human breast milk may protect against NEC by inhibiting gut colonization by pathogenic flora, enhancing maturation of the intestinal barrier, and controlling the pro-inflammatory response. A meta-analysis of a few small randomized controlled trials concluded that human breast milk confers a protective effect against NEC<sup>25,26</sup>. However, these trials varied in their definitions of breast milk and in trial design parameters, such as maternal vs. donor milk, term vs. preterm, fortified vs. unfortified, and feeding exclusively with human breast milk vs. supplementation with formula. A recent randomized controlled trial reported that an exclusively human-milk-based diet (i.e., human breast milk and a human-based fortifier) significantly

ing urological aging importance of proper ther urinary func- r circadian fluctua- ial natriuretic pep- Table 1). Thus, the ay contribute to the ons.

apathetic/parasymp- ice of the autonom- owever, increased quite contradictory ominate during the autonomic nervous y. Finally, the circa- nsidered when ex- yte excretion plays and the dysregula- e for many human

of urine volume in the LD condition, PDK mice lost this rhythmicity just 2 days after being released to DD. Moreover, urinary volume in PDK mice was significantly higher than in WT mice.

### RESEARCH DIRECTIONS

As discussed so far, the circadian control of voiding function is undoubtedly an intriguing possibility and needs the immediate attention of researchers in the field. With several clock mutant animals available, novel approaches are needed to delineate whether urinary functions are under the direct control of the mammalian time-keeping system. First of all, the possible existence of a local bladder clock and its functional significance needs to be addressed. Clock genes oscillating and cycling transcriptome/proteome profiling in the detrusor, urothelium, and sphincter remain unexplored. A second path of research is whether there exist circadian variations in the neural control of the bladder. Because various anatomical locations including the bladder itself, spinal cord, pontine micturition center, and cortical sites contribute to the neural control of bladder function [104-106], possible circadian control in these sites needs to be addressed. Other paths of research include consequences of circadian rhythm disruption in terms of urinary functions and vice versa. Indeed, some research has shown that nocturia and polyuria disrupt sleep architecture and may predict obstructive sleep apnea, whereas acute sleep deprivation results in excess diuresis and natriuresis [107-109]. Also interesting will be the causal relationships between circadian and urological aging [71-74, 110-112].

In modern society, more and more workers are engaged in

### ROLES OF CIRCADIAN CLOCKS IN URINARY FUNCTION?

Despite the ample evidence supporting clear circadian and diurnal variations in urine production and storage, the mechanism or mechanisms underlying this variation are largely unknown. Do circadian clocks, especially the local clocks in the kidney and bladder if they exist, have any significant roles? Two recent studies support this possibility. Zuber et al. [102] dem-



# Unit I

## ▶ 본문/Table/Figure 내 시간 단위 표기

Year (yr), Month (mo/month), Week (wk), Day (day), Hour (hr), Minute (min/minute), Second (sec)

### International System of Unit (SI)

Year (y), Month (mo), Week (wk), Day (d), Hour (h), Minute (min), Second (s)

## ▶ 띄어 쓰기

연산기호와 숫자 사이 띄어쓰기 여부 결정.

12 km, 30 mg, <25 mL(ml), 150°, 30°C, 12%, mean±SD, mean ± SE, 22±3°C, 10-50%, ×200, n=5, P < 0.001, p=0.001

+, -, ×, =, < .....

# Unit II

## ► *Preferred*

0.123 ( $P < .01$ )

140 nmol/L

120 mm Hg

135-150 nmol/L

37.5°C

1234

3 µL

15 kg

70 L

1500 g

nm

mg

## *Avoid*

.123

140nmol/L

120 mmHg

135 nmol/L-150 nmol/L

37.5 °C

1,234

0.003 mL

15 000 g

70 Ls

1500 gs

mµm

µkg

# Unit III

Eighty-two patients were enrolled in this retrospective study from March, 2006, to December, 2007. The median age of the enrolled patients was 62 years (range, 30~75). Thirty-four patients (41.5%) had a recurrence after curative resection and 48 patients (58.5%) had advanced gastric cancer that was impossible to resect curatively at of the initial diagnosis. Most patients (96.4%) had one or two involved regions, and their most common target lesion was a local or distant lymph node (Table 1).

(range, 30 to 75 years)  
(range, -1.3 to 2.0 ml)

## 2 Response

Response to treatment was evaluated every 6 weeks. The median follow-up duration was 8.0 months (range: 2.0~23.0 months) and median number of follow-ups was 13 times (range: 3~35 times). The overall response rate was 40.2%, with 2 patients (2.4%) experiencing

mula and the observed tumor volume ( $r=0.638$ ,  $p<0.001$ ) (Fig. 4A). The mean differences in volume measurements amounted to 0.3 ml (range, -1.3-2.0 ml; 95% confidence interval: -0.9-1.6 ml) (Fig. 4B).

# Unit III

**Table 2.** Changes in urodynamic parameters

	Preoperative	Postoperative
Uroflowmetry		
Qmax (mL/sec)	23.6 ± 1.6	39.5 ± 1.2
Voided volume (mL)	279.1 ± 17.8	506.1 ± 15.2
PVR (mL)	25.6 ± 6.0	171.2 ± 10.5
Cystometry		
MCC (mL)	416.5 ± 12.0	338.3 ± 15.5
BC (mL/cmH <sub>2</sub> O)	93.6 ± 7.2	19.3 ± 4.2
First desire (mL)	229.2 ± 10.6	226.0 ± 13.9
Normal desire (mL)	320.1 ± 14.2	291.9 ± 15.3
Strong desire (mL)	416.5 ± 12.0	338.3 ± 15.5
Pressure-flow study		
PdetQmax (cmH <sub>2</sub> O)	33.1 ± 1.9	29.3 ± 3.3

**Table 2.** Mean values of the clinical parameters.

	Baseline (0 week)	After 2 weeks	After 4 weeks
<b>Experimental group</b>			
PBI	0.577 ± 0.17	0.557 ± 0.15	0.515 ± 0.14
PI	1.813 ± 0.3	1.813 ± 0.3	1.813 ± 0.3
GI	1.261 ± 0.2	1.261 ± 0.2	1.261 ± 0.2
<b>Control group</b>			
PBI	0.529 ± 0.2	0.529 ± 0.2	0.529 ± 0.2
PI	1.91 ± 0.5	1.91 ± 0.5	1.91 ± 0.5
GI	1.110 ± 0.1	1.110 ± 0.1	1.110 ± 0.1

**TABLE 4.** Laparoendoscopic single-site surgery

Cases (n)
Age (yr)
BMI (kg/m <sup>2</sup> )
Allograft volume (C <sup>a</sup> )
Side (n)
Right
Left
Complex anatomy (n)
OR time (min)
Warm ischemia time (min)
EBL (ml)
Length of hospital stay (d)
Complications, n (Clavien grade)
Morphine equivalent (mg)
VAS at discharge
Days on oral pills
Days to return to work
Days to 100% recovery

# Reference

- ▶ 별도 강의 참조



# Table I

## ✓ Table legend

-legend 표기순서

전체 설명(데이터 설명)>약어 풀이>주석표기>기타

-약어 풀이

대소문자

약어간 구분 기호 ([,], [:] 등)

-주석(footnote) 표기

위첨자 특수기호 사용: \*, †, ‡, §, ||, ¶, \*\*, ††, ‡‡...

위첨자 알파벳 사용: a), b), c), d).../ a, b, c, d...

-주석 나열 표기

주석간 구분 기호 ([.], [,], [:])

주석별 줄 바꿈 여부

# Table II

## Elements of a Table

Table number and title

Rules (gridlines)

Column headings (heads)

Row headings (stubs)

Field with data cells (data field)

Footnotes

Characteristic	Patients with Cardiac Arrest (n = 225)	Controls (n = 234)
Age, mean (SD), y	54 (11)	50 (10)
Men	180	175
White	192	187
Medical history		
Diabetes	29	31
Hypertension	68	55
Previous CAD	49	21
Previous MI	32	25
Body mass index, mean (SD), kg/m <sup>2</sup>	26 (4)	25 (3)
Total cholesterol, mean (SD), mmol/L [mg/dL]	6.23 (0.08) [241 (3.1)]	5.85 (0.06) [226.2 (2.5)]

\* Values are number (percent) unless otherwise indicated.  
CAD, coronary artery disease; MI, myocardial infarction;  
SD, standard deviation

# Table III

**Table 1.** Comparison of the baseline characteristics of the patients

Variables	Group A	Group B	P-value
No. of patients	150	181	
Age (yr)	62.40 ± 0.82	67.08 ± 0.60	0.001
Prostate volume (g)	41.50 ± 1.73	48.10 ± 1.38	0.007
Qmax (mL/sec)	12.73 ± 0.65	11.95 ± 0.40	0.549
PSA (ng/mL)	3.33 ± 0.44	4.21 ± 0.50	0.210
PVR (mL)	59.0 ± 9.71	86.43 ± 7.40	0.17
IPSS			
Total	14.65 ± 0.67	16.46 ± 0.67	0.061
Storage subscore	6.23 ± 0.31	6.84 ± 0.31	0.172
Voiding subscore	8.42 ± 0.46	9.61 ± 0.44	0.066
QoL subscore	3.47 ± 0.106	3.71 ± 0.094	0.099

Values are presented as mean ± SEM.

Qmax, maximum urinary flow rate; PSA, prostate specific antigen; PVR, post voiding residual volume; IPSS, International Prostate Symptom Score ; QoL, quality of life.

Group A: alpha blocker group. Group B: alpha blocker + 5ARI group.

**Table 2.** Voiding dysfunction symptoms reported at 3 and 6 months after surgery

Parameters	3 mo	6 mo
Straining	19 (38.0)	8 (16.0) <sup>a)</sup>
Incontinence	13 (26.0)	5 (10.0)
Urgency	8 (16.0)	5 (10.0)
Dysuria	5 (10.0)	3 (6.0)
Overall symptoms	19 (38.0)	8 (16.0) <sup>a)</sup>
Need catheterization	6 (12.0)	2 (4.0)

Values are presented as number (%).

<sup>a)</sup>Statistical significance by Mann-Whitney test between low anterior resection and abdominoperineal resection.

# Table IV

**Table 3.** Comparison of uroflowmetry parameters between LAR and APR (I)

Parameters	LAR			APR		
	Preoperative	<u>6 mo</u>	<u>P-value</u>	Preoperative	6 mo	P-value
VV (mL)	286 ± 46	265 ± 56	0.25	292 ± 59	285 ± 74	0.94
Qmax (mL/min)	23.9 ± 5.6	21.1 ± 6.4	0.06	25.6 ± 5.4	19.9 ± 5.5	0.01 <sup>a)</sup>
Qavg (mL/min)	11.5 ± 3.7	10.2 ± 3.5	0.08	12.1 ± 4.4	9.3 ± 3.0	0.18
PVR (mL)	19.8 ± 17.0	22.2 ± 20.5	0.11	16.9 ± 22.2	34.6 ± 45.7	0.12

Values are presented as mean ± SD.

LAR, low anterior resection; APR, abdominoperineal resection; VV, voided volume; Qmax, maximal flow rate; Qavg, average flow rate; PVR, post-void residual volume.

<sup>a)</sup>Statistical significance by Wilcoxon signed rank test.

**Table 5.** Voiding dysfunction results after rectal cancer surgery

Author	Year	Patients	Women (%)	Voiding dysfunction (%)
Havenga et al. [11]	1996	138	39	32
Mass et al. [26]	1998	47	30	28
Maurel et al. [27]	1999	60	36	24
Sterk et al. [17]	2005	52	30	8
Present data	2011	50	39	38 <sup>a)</sup> , 16 <sup>b)</sup>

<sup>a)</sup>Rate at 6 months after surgery. <sup>b)</sup>Rate at 6 months after surgery

# Table V

TABLE I  
EXPERIMENTAL NEEDLE PLACEMENT ACCURACY TEST RESULTS

Method of axes calculations	All image slices for each marker					One image slice per marker				
Markers used to define channel	"1, 2"	"1, 3"	"1, 4"	"3, 4"	"1,2,3,4"	"1, 2"	"1, 3"	"1, 4"	"3, 4"	"1,2,3,4"
Distance between markers (mm)	25	45	80	35	80	25	45	80	35	80
Mean angle $\alpha$ needle/device axis ( $^{\circ}$ )	38.84 $^{\circ}$	38.74 $^{\circ}$	38.83 $^{\circ}$	38.94 $^{\circ}$	38.82 $^{\circ}$	38.62 $^{\circ}$	38.6 $^{\circ}$	38.73 $^{\circ}$	38.88 $^{\circ}$	38.74 $^{\circ}$
Std dev of angle $\alpha$ needle/device axis ( $^{\circ}$ )	0.19 $^{\circ}$	0.14 $^{\circ}$	0.12 $^{\circ}$	0.18 $^{\circ}$	0.12 $^{\circ}$	0.23 $^{\circ}$	0.18 $^{\circ}$	0.15 $^{\circ}$	0.2 $^{\circ}$	0.14 $^{\circ}$
Max dev of angle $\alpha$ needle/device axis ( $^{\circ}$ )	0.48 $^{\circ}$	0.33 $^{\circ}$	0.26 $^{\circ}$	0.37 $^{\circ}$	0.27 $^{\circ}$	0.46 $^{\circ}$	0.37 $^{\circ}$	0.29 $^{\circ}$	0.41 $^{\circ}$	0.3
Mean dist. d of intersection (mm)	51.77	51.59	51.75	51.68	51.71	51.51	51.48	51.68	51.63	51.63
Std dev of dist. d of intersection (mm)	0.19	0.2	0.17	0.16	0.16	0.3	0.2	0.2	0.2	0.19
Max dev of dist. d of intersection (mm)	0.52	0.41	0.26	0.29	0.26	0.66	0.38	0.37	0.35	0.32

The left half of the table presents the results with all image slices for each marker used to calculate an axis. The right half contains accuracy entries where only one image slice per marker was used to calculate an axis.

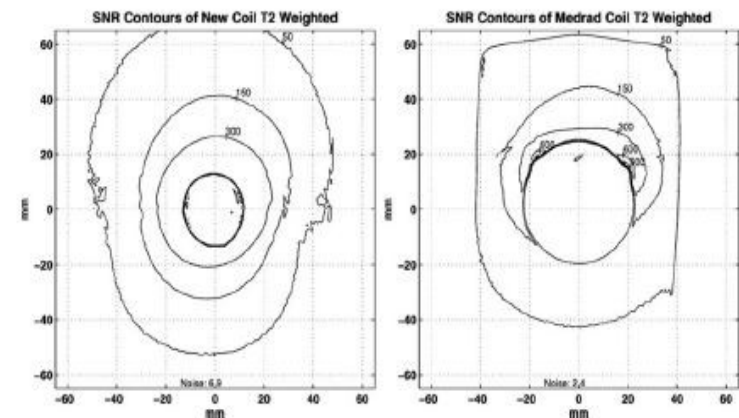
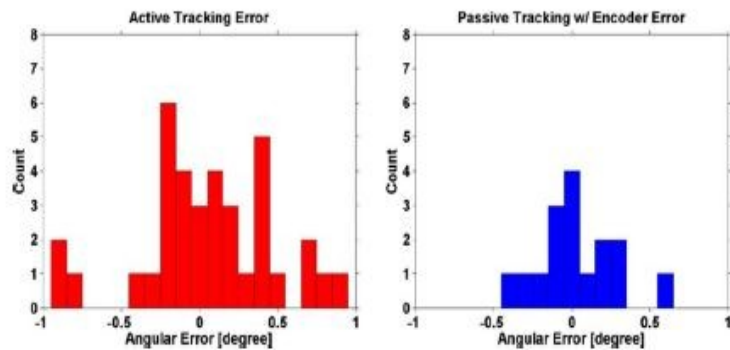


Fig. 9. Histograms for angular errors for 36 active tracking trials (left) and 16 hybrid tracking trials (right) comprising passive and encoder tracking. Maxi



# 대한의학학술지편집인협의회 학술지 재평가 항목

## 실물평가항목

### 2-10 표(table)의 설명문안과 배치

- (1) 1점 : 오타자가 없다.
- (2) 1점 : 사용한 설명 각주가 올바르다.
- (3) 1점 : 표의 내부 중간에 세로줄, 가로줄이 없다.
- (4) 1점 : 표의 내부에 정렬의 일관성이 있다.
- (5) 1점 : 표의 크기 및 배치가 적절하다.
- (6) -3점 : 원본 표가 아니거나 남의 표를 사용하면서 원저를 인용하지 않고 있다(3점을 감점함).
- ( ) : (1)-(6) 해당 점수의 합

# Table V

Q1. 수정할 부분 찾아 보세요.

**Table 1.** Demographic and Clinical Characteristics of the Subjects (n=28)

Characteristic	Cryptogenic (n=7)	Symptomatic (n=21)
Sex, n		
Male	3	12
Female	4	9
Mean age of onset, mo	11.4±3.9	7.43±4.2
Type of spasms, n (%)		
Flexor	3 (10.7)	12 (42.8)
Extensor	4 (14.2)	6 (21.4)
Mixed	-	3 (10.7)
Etiology, n (%)	7 (25.0)	
HIE	-	12 (42.9)
TS	-	3 (10.7)
Pachygyria	-	3 (10.7)
Hemorrhagic Infarction	-	2 (7.1)
Meningitis		1 (3.6)
Follow-up period, mo	16.7±4.2	17.3±4.9

HIE, hypoxic-ischemic encephalopathy; TS, tuberous sclerosis.

# Figure I

## ✓ Figure 형식

- 파일 format: TIFF, EPS (JPEG는 해상도가 높을 경우)
- 적정 size: 그림의 가로폭(width)이 4 inch (인쇄본 1 column 사이즈)
- 해상도
  - 900 DPI/PPI for black and white images, such as line drawings or graphs.
  - 600 DPI/PPI for photographs containing pictures and line elements, i.e., text labels, thin lines, arrows.
  - 300 DPI/PPI for picture-only photographs.

## ✓ Figure legend

- 표기: Fig. 1. / Figure. 1. / Fig 1. 등
- legend 표기순서  
Figure 설명>약어 풀이>주석 표기>기타
- 약어 풀이 및 주석 표기 등은 Table legend 표기에 준함.
- 그림이 2개 이상인 경우 표기  
(A) 설명. (B) 설명. (C) 설명. / (a) 설명. (b) 설명. (c) 설명.
- 현미경 사진의 경우 염색방법 및 배율을 기록함. ex) H&E, x400

# Figure II

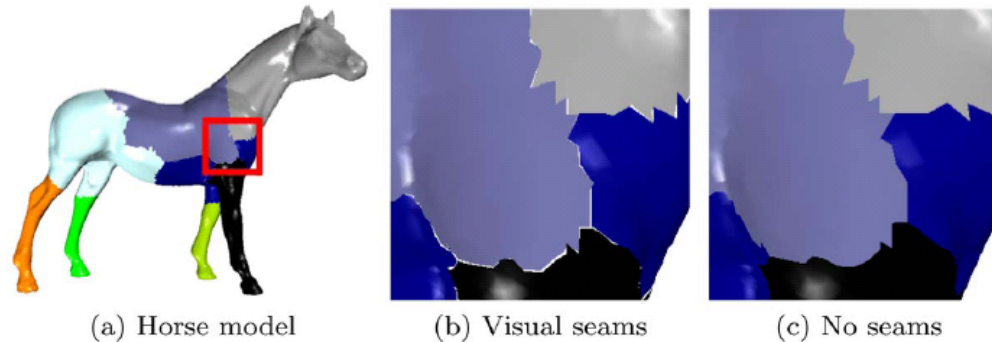


Figure 2. (a) Rendering of a horse model. (b) and (c) show zoom-ins of the red rectangle in (a); (b) visual seams from straightforward local quantization; (c) visual seams have been resolved by our method.

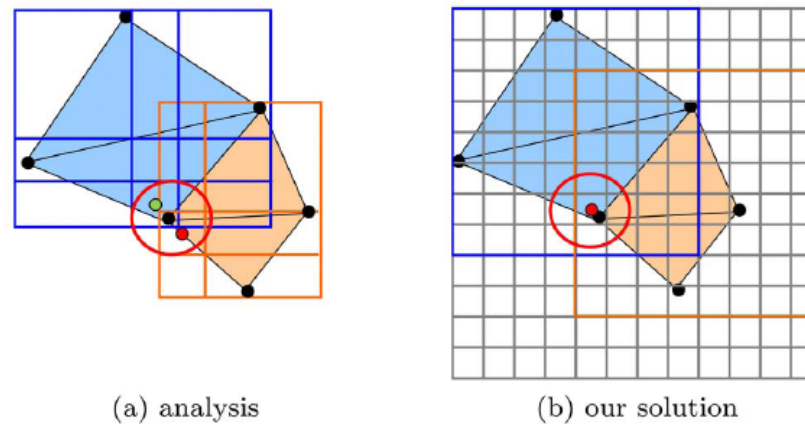
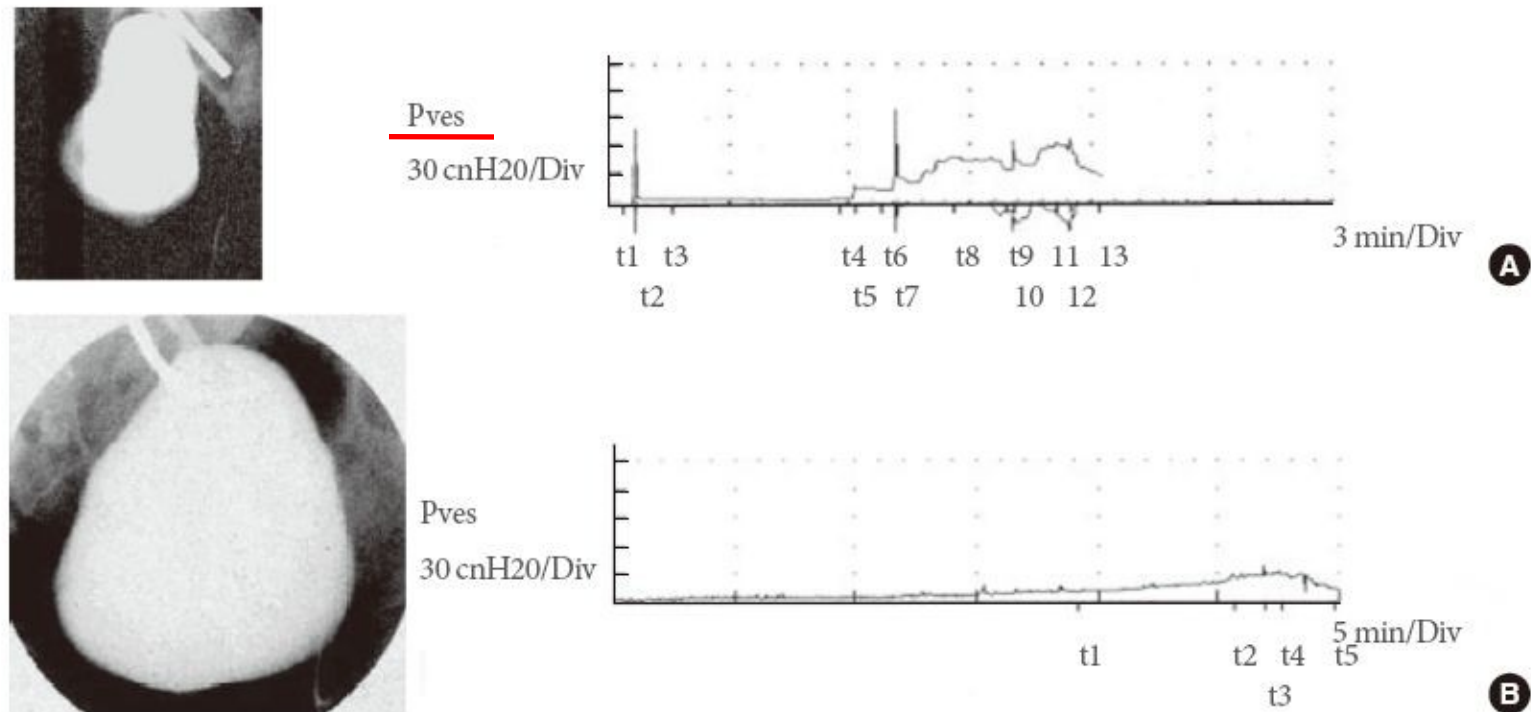


Figure 3. (a) A black vertex shared by two sub-meshes is restored onto the green and red positions due to the difference of locally quantized cells. (b) The restored positions from two sub-meshes have become the same due to the alignment of locally quantized cells.

# Figure III



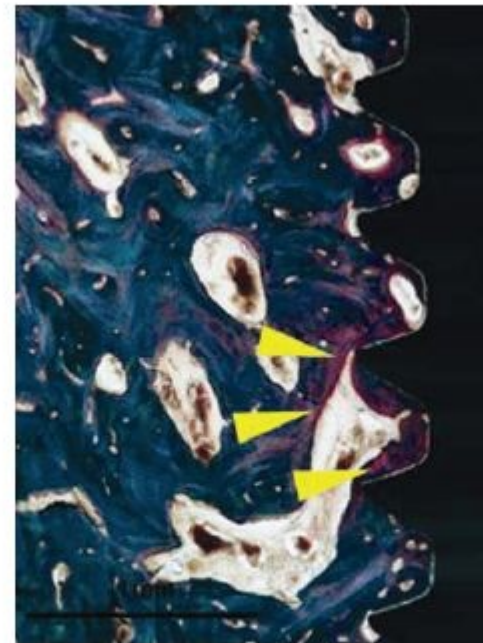
**Fig. 2.** Cystograms and urodynamic studies of a patient before and after implantation of the tissue engineered bladder. (A) Preoperative results indicate an irregular-shaped bladder in the cystogram (left) and abnormal bladder pressures as the bladder is filled during urodynamic studies (right). (B) Postoperatively, findings are significantly improved. Pves, intravesical pressure. (Reprinted from Atala A, Bauer SB, Soker S, Yoo JJ, Retik AB. Lancet 2006;367:1241-6, with permission of Elsevier Limited [97]).



# Figure IV



**Figure 9.** Defect formation group. Activated osteoblasts are aligned along the alveolar bone and relatively large blood vessels are located nearby (H&E staining, x400).



**Figure 1.** Histologic view of the fibronectin-coated sandblasted, large-grit, acid-etched group at 4 weeks (Goldner's trichrome staining, x40). Osteoid matrix (arrow) and newly formed mineralized bone in the interthread space were observed.

# 대한의학학술지편집인협의회 학술지 재평가 항목

## 실물평가항목

### 2-11 사진의 선명도, 설명 및 배치

- (1) 1점 : **사진이 선명하다.**
- (2) 1점 : 설명체재 (배율, 염색명 등 포함)에 일관성이 있다.
- (3) 1점 : 설명이 정확하고(사진에 각주, 화살표 등 표시) 상세하다.
- (4) 1점 : 크기와 배치가 적절하다.
- (5) 1점 : 사진설명에 오타자가 없다.
- (6) -3점 : **원본 사진이 아니거나 남의 사진을 사용하면서 원저를 인용하지 않고 있다**  
(3점을 감점함).
- ( ) : (1)-(6) 해당 점수의 합

### 2-12 도형그림(line drawing)의 작성 방법, 글씨 크기 및 배치

- (1) 1점 : 도형그림이 선명하다.
- (2) 1점 : 글씨 크기가 적절하다.
- (3) 1점 : 도형그림 크기가 적절하다.
- (4) 1점 : 배치가 적절하다.
- (5) 1점 : 그림설명(제목, 약어)에 오타자가 없다.
- (6) -3점 : 타인의 도형그림을 사용하면서 원저를 인용하지 않고 있다(3점을 감점함).
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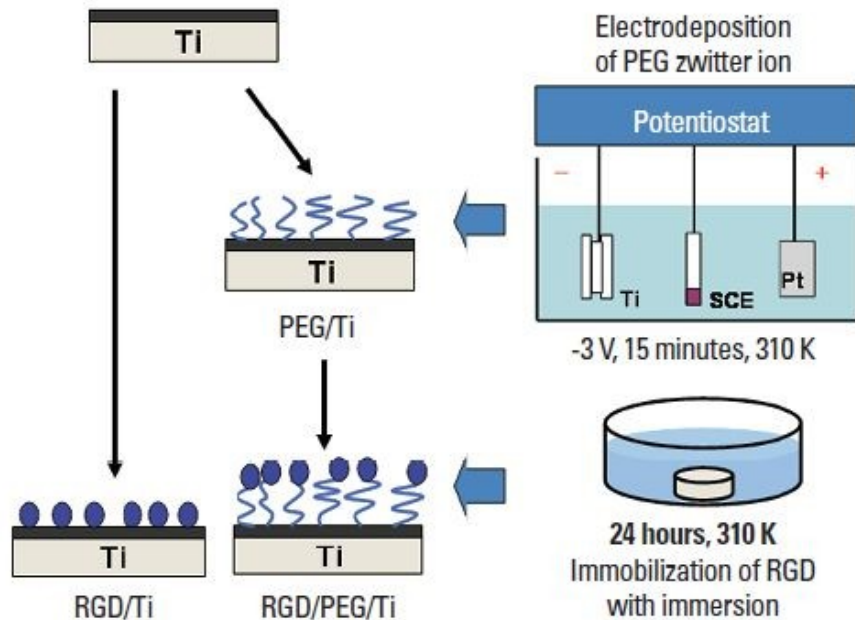
2. **Reprinted from** Gomez-Llorente et al. Proc Nutr Soc 2010; 69:381-9, **with permission of** Cambridge University Press) [50]

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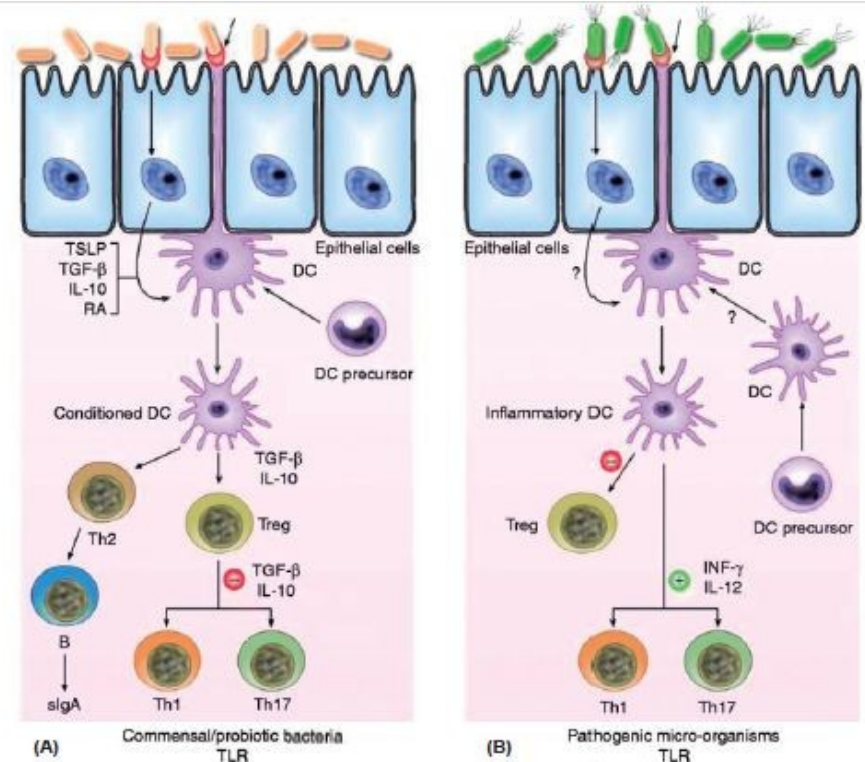
1. **Reproduced (Modified) with permission from** Cambridge University Press<sup>50</sup>).

2. **Reproduced (Modified) from** Tanaka et al. J Colloid Interface Sci 2009;330:138-43, **with permission of** Elsevier) [48].

# Copyright & Permission V



**Figure 11.** Poly(ethylene glycol) (PEG) zwitter ion is electrodeposited to titanium (Ti) firstly and Arg-Gly-Asp (RGD) is immobilized on the PEG. (Modified from Tanaka Y, Saito H, Tsutsumi Y, Doi H, Nomura N, Imai H, et al. *J Colloid Interface Sci* 2009;330:138-43, with permission of Elsevier) [48].



**Fig. 1.** Schematic view of the potential mechanism of action by which commensal bacteria and pathogenic bacteria interact with Toll-like receptors (TLRs) and elicit different immune responses. (A) Commensal and probiotic bacteria interact with intestinal epithelial-cell barrier and dendritic cells (DCs) resident in the intestine. Some cytokines, including interleukin (IL)-10, transforming growth factor beta (TGF-β) and thymic stromal lymphopoietin (TSLP), are expressed in intestinal epithelial cells, as a result of their interactions. Stimulation of cell TLR mediated by bacteria leads to up-regulation of TGF-β and IL-10, which in turn may limit the responsiveness of intestinal DCs resulting in the expansion and/or survival of T-cells with regulatory capacities, and limiting the ability of driving Th1, Th2 and Th17-cell responses. (B) Pathogenic bacteria have virulence factors that interact with intestinal epithelial-cell barrier and DCs resident in the intestine. Invasion of epithelium and direct interaction with DCs lead to activation of TLR and enhanced production of pro-inflammatory cytokines including interferon-gamma (INF-γ) and IL-12, which are capable of driving Th1, Th2 and Th17 response. RA, retinoic acid; sIgA, secreted Ig A; Th, T helper cell; Treg, T regulatory cell (Reprinted from Gomez-Llorente C, Munoz S, Gil A. *Proc Nutr Soc* 2010; 69:381-9, with permission of Cambridge University Press) [50].





# Effect of pH on the interaction between zwitterions and titanium oxide

Yuta Tanaka<sup>a</sup>, Haruka Saito<sup>b</sup>, Yusuke Tsutsumi<sup>a</sup>, Hisashi Doi<sup>a</sup>, Naoyuki Nomura<sup>a</sup>, Hachiro Imai<sup>b</sup>, Takao Hanawa<sup>a,\*</sup>

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<sup>b</sup> Department of Materials Science, Shibaura Institute of Technology, Tokyo 135-8548, Japan

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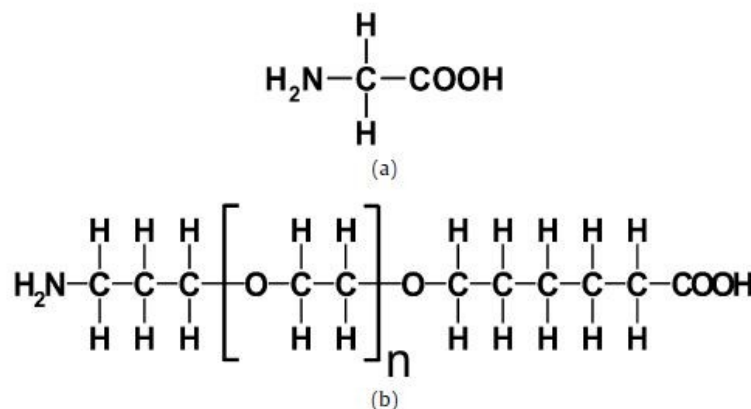


Fig. 1. Chemical structures of glycine and zwitterionic NH<sub>2</sub>-PEG-COOH for immobilization on Ti with immersion and electrodeposition.

synthesis, polymerization, and immersion, and the immobilization strength of PLL-g-PEG on the metals is unclear.

Therefore, a simple immobilization technique with consideration of the IEP and pzc is necessary. In our current studies, we re-

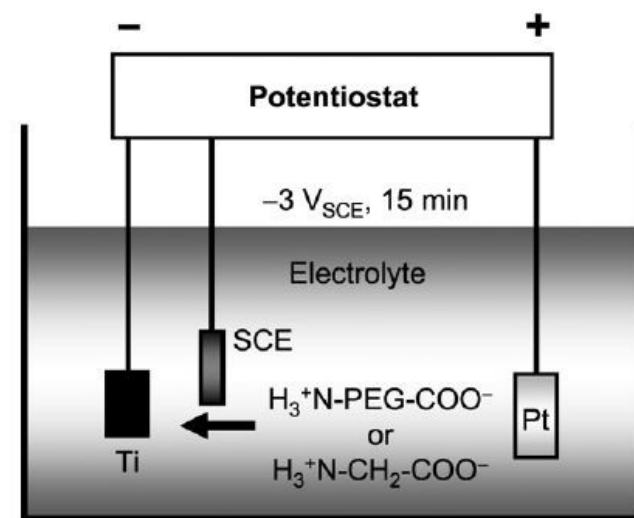


Fig. 2. Schematic illustration of electrodeposition. During cathodic polarization, ionized glycine or NH<sub>2</sub>-PEG-COOH migrated to the cathode (Ti).



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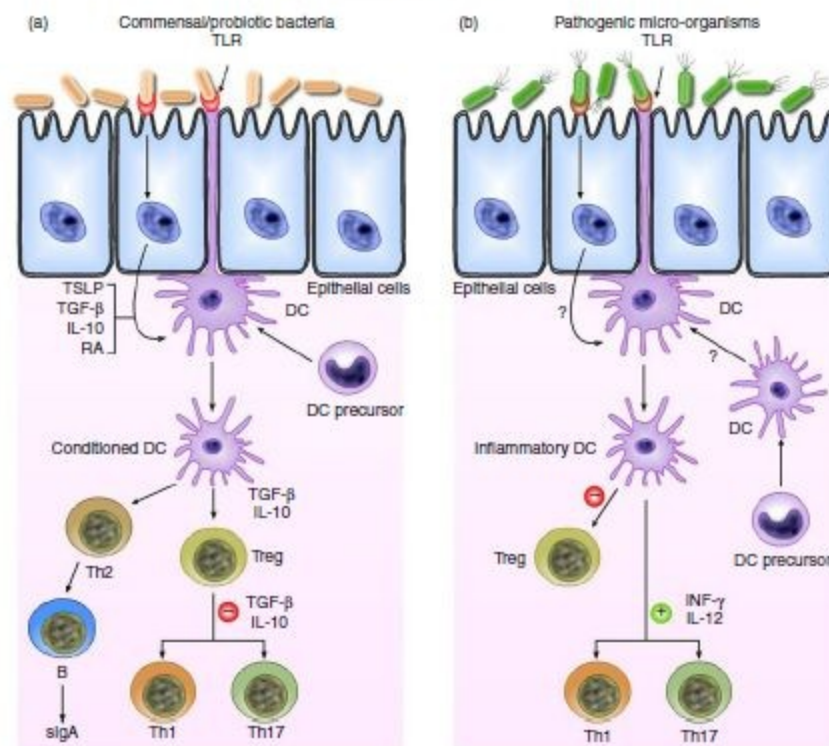
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#### Toll-like receptors, immunotolerance and probiotics

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**Fig. 1.** Schematic view of the potential mechanism of action by which commensal bacteria and pathogenic bacteria interact with Toll-like receptors (TLR) and elicit different immune responses. (a) Commensal and probiotic bacteria interact with intestinal epithelial-cell barrier and dendritic cells (DC) resident in the intestine. Some cytokines, including IL-10, transforming growth factor (TGF)- $\beta$  and thymic stromal lymphopoietin (TSLP), are expressed in intestinal epithelial cells, as a result of their interactions. Stimulation of cell TLR mediated by bacteria leads to up-regulation of TGF- $\beta$  and IL-10, which in turn may limit the responsiveness of intestinal DCs resulting in the expansion and/or survival of T-cells with regulatory capacities, and limiting the ability of driving Th1, Th2 and Th17-cell responses. (b) Pathogenic bacteria have virulence factors that interact with intestinal epithelial-cell barrier and DCs resident in the intestine. Invasion of epithelium and direct interaction with DCs lead to activation of TLR and

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## Effect of pH on the interaction between zwitterions and titanium oxide

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### Abstract

The isoelectric points (IEPs) of two zwitterions, glycine and both-terminals-terminated poly(ethylene glycol) (NH<sub>2</sub>-PEG-COOH), were determined from the titration curves, and the thicknesses of zwitterion layers

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