

ภาคผนวก ก

บทคัดย่อและผลจากการคัดแยกข้อความ

ต่อไปนี้เป็นบทคัดย่อที่ใช้ในการทดสอบการคัดแยกข้อความที่มีความหมายจากโครงสร้างต้นไม้มองไวยากรณ์ และแสดงผลลัพธ์ที่ได้จากการคัดแยก โดยขีดเส้นใต้ข้อความที่ต้องการทำการคัดแยกและคำสำคัญ

ก.1 บทคัดย่อสังคมวิทยา

บทคัดย่อ 1

Examines the construct of ethics in general and of business ethics in particular

Provides a conceptual discussion of the dynamics of ethics in society and the dynamics of business ethics in the marketplace

Ethics and business ethics constructs are dependent upon two principal parameters - time and culture

Eventually, ethics and business ethics are about what is perceived as acceptable or unacceptable at a specific time and in a specific cultural setting

What was ethical yesterday may not be ethical today, and what is ethical today may not be ethical tomorrow

Furthermore, both the company's view and the views of others may determine what is acceptable or unacceptable in business ethics

This is a social construction that may differ between the parties involved in a specific context

The discussion is supported by two brief and different cases from the automobile industry

This research contributes a set of generic models that examine business ethics dynamics

ผลจากการคัดแยกจากบทคัดย่อ 1

- 1) Subject: Ethics and business ethics constructs
Preposition: upon two principal parameters - time and culture
Keyword: dependent
- 2) Subject: The discussion
Preposition: from the automobile industry
Keyword: supported
- 3) Subject: This research
Object : a set of generic models that examine business ethics dynamics
Keyword: contributes

บทคัดย่อ 2

The topic of this paper focuses on proactive versus reactive business ethics performance in the marketplace

The internal perception of a corporation and the external perception of the same corporation are used as generic determinants of business ethics performance

In turn, they are underpinned by evolutionary and contextual issues in the marketplace

The authors provide a generic conceptual framework of proactive and reactive business ethics performance

Case illustrations underpin the positives and negatives of proactive and reactive business ethics in the marketplace

A profile analysis process of proactive and reactive business ethics performance is also outlined

The gap between the internal and external perceptions of a corporation's actions becomes crucial to achieve successful business ethics performance in the marketplace

Therefore, a corporation's current business ethics performance should always be regarded as an on-the-spot-account that is either proactive or reactive

An important insight of this research is that business ethics performance requires the ongoing re-connection with reality by corporations

ผลจากการคัดแยกจากบทคัดย่อ 2

- 1) Subject: The topic of this paper
Preposition: on proactive versus reactive business ethics performance
Keyword: focuses
- 2) Subject: The internal perception of a corporation and the external perception of the same corporation
Preposition: as generic determinants of business ethics performance
Keyword: used
- 3) Subject: they
Preposition: in the marketplace
Keyword: underpinned
- 4) Subject: The authors
Object: a generic conceptual framework of proactive and reactive business ethics performance
Keyword: provide
- 5) Subject: Case illustrations
Object: the positives and negatives of proactive and reactive business ethics
Keyword: underpin
- 6) Subject: A profile analysis process of proactive and reactive business ethics performance
Keyword: outlined
- 7) Subject: The gap between internal and external perceptions of actions
Object: successful business ethics performance
Keyword: becomes
- 8) Subject: current business ethics performance
Keyword: regarded
Preposition: as an on-the-spot-account that is or reactive

บทคัดย่อ 3

This study analyzes the marketing ethics decision-making process of Middle-Eastern marketers
In particular, it examines the relative influences of ethical perceptions, perceived importance of ethics, and age on ethical intentions of marketers in the Middle East

A self-administered questionnaire was used as the data collection technique for this study

Perception of ethical problem and ethical intention were operationalized by means of two marketing ethics scenarios

Age of respondents was measured directly and perceived importance of ethics was measured by a scale that has been used a number of times in the literature

Convenience samples of marketers from three Middle-Eastern countries, Egypt, Jordan and Saudi Arabia, were used in this study

The survey results generally indicate that a perceived ethical problem is a positive factor of a Middle-Eastern marketer's ethical intention, as hypothesized

The results also support the hypothesis regarding the influence of perceived importance of ethics, that Middle-Eastern marketers who perceive ethics to be important are more likely to have an ethical intention than Middle-Eastern marketers who do not perceive ethics to be important

The research hypothesis regarding the influence of age, however, is not supported

Implications of the findings are discussed

ผลจากการคัดแยกจากบทคัดย่อ 3

- 1) Subject: This study

Object: the marketing ethics decision-making process of Middle-Eastern marketers

Keyword: analyzes

- 2) Subject: it

Object: the relative influences of ethical perceptions, perceived importance of, and age

Keyword: examines

- 3) Subject: A self-administered questionnaire

Preposition: for this study

Keyword: used

- 4) Subject: Convenience samples of marketers from three Middle-Eastern countries, Egypt, Jordan and Saudi Arabia,
 Preposition: this study
 Keyword: used

บทคัดย่อ 4

To justify fully the inclusion of a business ethics course in the business school curriculum it is necessary that the course achieve four goals

Yet two of these goals are not even addressed in the business ethics texts used today in business ethics courses

The other two goals are addressed in business ethics texts and research indicates these goals are achievable

The best way to realize these attainable goals is to incorporate the teaching of ethics into regular business courses

ผลจากการคัดแยกจากบทคัดย่อ 4

- 1) Subject: two of these goals
 Keyword: addressed
 Preposition: in the business ethics texts used today in business ethics courses
- 2) Subject: The other two goals
 Preposition: in business ethics texts
 Keyword: addressed

บทคัดย่อ 5

This article examines the results of a study conducted of the top 100 public sector units in Sweden

The aim of the study was to examine and describe the codes of ethics in these Swedish public sector units

Reports on the responses of 27 public sector units that possessed a code of ethics

The content analyses of these codes indicate that they have only recently become an interest in public Sweden

Many public sector units are in the early stages of development and assimilation of codes of ethics artifacts into overall ethics policies in the organization

A customized PUBSEC-scale was used to measure and evaluate the content of the codes

The code of ethics best practice in the Swedish public sector has been used to develop a public sector scale consisting of seven dimensions and 41 items

The PUBSEC-scale differs from the current private sector scales in literature, owing to the specific characteristics of the public sector

ผลจากการคัดแยกจากบทคัดย่อ 5

- 1) Subject: This article

Object: the results of a study conducted of top 100 public sector units

Keyword: examines

- 2) Subject: The content analyses of these codes

Object: they

Keyword: indicate

- 3) Subject: A customized PUBSEC-scale

Keyword = used

บทคัดย่อ 6

By its nature, the capitalistic economic system has produced numerous ethical conflicts

The professions, as well as business in general, have been impacted by the increased emphasis on ethical behaviour

In the past few years, there has been an increased interest in business ethics

One profession which has especially grown due to the increased awareness of ethical issues is internal auditing

This has been in part due to the need for more reliable accounting records, tighter administrative controls, and improved operational efficiency

In order to provide some guidance to its members regarding ethical behaviour, the Institute of Internal Auditors has constructed a code of ethics

Describes how, through the use of a questionnaire, the views of practising internal auditors regarding the currently used code of ethics were obtained and analyzed

The responses revealed that a substantial number of internal auditors do consult the code of ethics for guidance in making ethical decisions

A majority of the auditors believe that the code of ethics could be more effective if better enforcement methods were put into effect

Most respondents also believe that the code is complete as it is currently written and does not need to be expanded

ผลจากการคัดแยกจากบทคัดย่อ 6

- 1) Subject: the capitalistic economic system

Object: numerous ethical conflicts

Keyword: produced

- 2) Subject: The professions, as well as business ,

Object: on ethical behaviour

Keyword: impacted

- 3) Subject: Institute of Internal Auditors

Object: a code of ethics

Keyword: constructed

- 4) Subject: a substantial number of internal auditors

Object: the code of ethics

Keyword: consult

บทคัดย่อ 7

Businesses cannot ignore ethics

Indeed, for some ethics has been added to their corporate values

But help is needed by businesses in integrating ethical practices and competencies

Initially this requires an increased and shared understanding of ethics in business

Three possible approaches are explained and explored, viz; social, transcendental and tactical

The case for ethics in business is made by highlighting the consequences of potential dilemmas between individual and organization values

The role of ethics in being emotionally intelligent is explored

Specifically, aspects of emotional intelligence are considered in the context of leaders experiencing day-to-day ethical challenges

Finally, the challenge to trainers is highlighted in tackling what can be a major transformational process for organisations

ผลจากการคัดแยกจากบทคัดย่อ 7

- 1) Subject: Businesses

Object: ethics

Keyword: ignore

- 2) Subject: ethics

Preposition: to their corporate values

Keyword: added

- 3) Subject: The case for ethics in business

Object: the consequences of potential dilemmas

Keyword: made

- 4) Subject: The role of ethics in being intelligent

Keyword: explored

- 5) Subject: aspects of emotional intelligence

Preposition: in the context of leaders experiencing day-to-day ethical challenges

Keyword: considered

บทคัดย่อ 8

Theoretically, a contribution of this article is the pinpointed connection between corporate ethics and trust in intra-corporate relationships

Furthermore, it contributes to a conceptual framework that distinguishes between the constructs of business ethics and corporate ethics

The authors also provide a grounded conceptual framework of corporate ethics and trust

The principal dyadic determinants of corporate ethics in intra-corporate relationships are

interpreted to be management behaviour versus employee perception of that behaviour

Empirically, the contribution is an in-depth and longitudinal case description that underpins the topic and the discussion provided in the article

ผลจากการคัดแยกจากบทคัดย่อ 8

- 1) Subject: The authors
Object: a grounded conceptual framework of corporate ethics and trust
Keyword: provide
- 2) Subject: The principal dyadic determinants of corporate ethics in intra-corporate relationships
Object: management behaviour versus employee perception of that behaviour
Keyword: interpreted
- 3) Subject: the topic and the discussion provided in the article
Object: the topic and the discussion provided in the article
Keyword: underpins

บทคัดย่อ 9

Presents a literature review of reported findings on the analyses of the contents of codes of ethics in corporations and the various strategies, processes, procedures and resources that accompany and support them

The starting point is the seminal paper by Cressy and Moore

In the literature a distinction is drawn between inspirational and prescriptive code types, and this classification becomes a focal point on what is the appropriate subject matter for a code of ethics

The issue remains an unresolved feature of research articles

For some researchers a document that prescribes behaviours is not a code of ethics because it precludes empowerment of addressees to make the ethical decisions

Others consider prescriptive documents to be "best practice" for codes of ethics

The latter authors propose the perspective that the only satisfactory contents for codes are clear and precise behavioural dictates that lend themselves to a supporting disciplinary function

In practice the managers of corporations continue to publish the types of code they favour

ผลจากการคัดแยกจากบทคัดย่อ 9

- 1) Subject: a distinction

Preposition: between inspirational and prescriptive code types

Keyword: drawn

- 2) Subject: this classification

Object: a focal point

Keyword: becomes

- 3) Subject: The issue

Object: an unresolved feature of research articles

Keyword: remains

บทคัดย่อ 10

The ethics of rights or the separative model has dominated Western thought since the Enlightenment and the ethics of care was developed as a feminist critique seeking to rebalance our basic thought structure

The ethics of care is used as a framework for analysis and as a visionary ideal to evaluate proposed changes in accounting practice

Reports on changes in conceptualizing accounting practice proposed by the AICPA's special committees on assurance and financial reporting

The proposals challenge traditional views of accounting practice, based on rights thinking, and adopt concepts from new management theories compatible with the ethics of care

Contents that it is not clear to what extent these proposals, and other current proposals to address the problem of auditor independence, represent a real paradigm shift

The proposed changes are driven by an economic imperative to expand the scope of services of the profession and may result in a significant threat to the accounting profession's claims to professional status

ผลจากการคัดแยกจากบทคัดย่อ 10

- 1) Subject: the ethics of care
Preposition: as a feminist critique seeking to rebalance our basic thought structure
Keyword: developed
- 2) Subject: The ethics of care
Keyword: used
Object: proposed changes
- 3) Subject: Reports on changes in conceptualizing accounting practice
Object: committees on assurance and financial reporting
Keyword: proposed
- 4) Subject: The proposals
Object: traditional views of accounting practice, based on rights thinking
Keyword: challenge
- 5) Subject: The proposals
Object: concepts from new management theories compatible
Keyword: adopt

บทคัดย่อ 11

The study of business ethics is growing apace

The ethical dimension is increasingly seen as an integral aspect of organisational culture

Ethical issues are explored starting with international business, then narrowing the focus to domestic business, and finally narrowing it still further to professional ethics

In so doing, areas such as bribery and corruption, social marketing, ethics education, capitalism versus socialism, Free-masonry, the religious dimension and professional codes of ethics are touched on

Survey evidence is presented on the relative ethical positioning of major professions

An analysis of real-life ethical situations leads to the formulation of three models of corporate codes of conduct, and to conclusions as to the pivotal role the ethical dimension can play in corporate life

ผลจากการคัดแยกจากบทคัดย่อ 11

- 1) Subject: The ethical dimension
Preposition: as an integral aspect of organizational culture
Keyword: seen
- 2) Subject: Survey evidence
Preposition: on the relative ethical positioning of major professions
Keyword: presented
- 3) Subject: An analysis of real-life ethical situations
Preposition: as to the pivotal role the ethical dimension can play in corporate life
Keyword: leads

บทคัดย่อ 12

The activities of oil and other energy companies are increasingly being challenged by nongovernmental organizations and media to justify their behavior in ethical terms

Activities that visibly damage the environment have long been challenged by advocacy groups

In recent years public interest has broadened into calls to respect “sustainability,” human rights, and other ethical imperatives

This article attempts to set these developments in the context of international promotion of the idea of a global “civil society”

Ethical codes reach by persuasion, beyond coercive legal obligations

They have the character and role of repeated games

Codes of behavior for business are rooted in national and cultural values, which may conflict at the international level

However, many governments following the lead of the United States are often developing sanctions to promote ethical behavior by businesses, to redress the failure of markets to manage common access to resources and to protect aspects of the natural world for its own sake

Examples are efforts to uphold human rights, fight against corruption, and promote sustainability of resources

Business leaders and the nongovernment organizations that advocate international values on these subjects have the opportunity to contribute to the development of global civil society by working together to establish persuasive codes that do not require slow and difficult international intervention by government

ผลจากการคัดแยกจากบทคัดย่อ 12

- 1) Subject: The activities of oil and other energy companies
Preposition: by nongovernmental organizations and media
Keyword: challenged
- 2) Subject: Codes of behavior for business
Object: national and cultural values, which may conflict at the international level
Keyword: rooted
- 3) Subject: many governments following the lead of the United States
Object: sanctions
Keyword: developing

บทคัดย่อ 13

This essay attempts to develop a new theoretical model for business ethics distinct from the two canonical business-ethics theories, the stakeholder theory and the shareholder value theory

Milton Friedman argued that because managers are agents of the company 's owners, their sole moral responsibility is to maximize owner returns

Thomas Pogge has recently suggested that such a view involves a kind of moral incoherence and that we should reject the efficacy of social arrangements like the principal-agent relationship in altering moral obligations

Both views fail to give proper account of moral responsibilities in business contexts

We must distinguish “minimal moral obligations” (stemming from justice and rights) from “maximal moral obligations” (stemming from all other moral considerations, including duties of aid, beneficence, and the virtues)

Minimal obligations apply to all persons, but maximal obligations can be effected by social arrangements like the owner-manager relationship

There may be moral obligations incumbent on owners that do not apply to managers

ผลจากการคัดแยกจากบทคัดย่อ 13

1) Subject: This essay

Object: a new theoretical model for business ethics distinct from the two canonical business-ethics theories, the stakeholder theory and the shareholder value theory

Keyword: attempts

2) Subject: We

Object: minimal moral obligations

Keyword: distinguish

3) Subject: Minimal obligations

Object: to all persons

Keyword: apply

4) Subject: maximal obligations

Object: the owner-manager relationship

Keyword: effected

บทคัดย่อ 14

Business ethics and corporate social responsibility have gained more attention in recent years

However, the consumers 'perspective on ethics is still a little researched area

Consumers ' willingness to promote business ethics as well as the obstacles to ethical consumption are investigated

The results of the study show that while the majority of the respondents regard business ethics as important, this attitude does not translate into their choice behaviour

Consumers are uncertain about which products and firms follow ethical rules and which do not

The most important obstacles to ethical consumption were difficulties in obtaining information, problems in product availability and high prices of ethical products

ผลจากการคัดแยกจากบทคัดย่อ 14

- 1) Subject: Business ethics and corporate social responsibility
Object: more attention
Keyword: gained
- 2) Subject: the majority of the respondents
Object: business ethics
Keyword: regard
- 3) Subject: this attitude
Object: their choice behaviour
Keyword: translate

ก.2 บทคัดย่อไบโอเคมี

บทคัดย่อ 1

Translation of mitochondrial cytochrome b in Saccharomyces cerevisiae requires the nuclearly encoded proteins Cbs1p, Cbs2p and Cbp6p

So far no homologs have been identified, except for the product of the S. cerevisiae orf YHR063C, which has some similarity to Cbs2p

Here we analyze the effect of a null mutation of YHR063C and show that it is not required for mitochondrial respiration

In addition, we report on the importance of the carboxyl-terminus of Cbs2p for its function

We show that truncations and some directed mutations in the carboxyl-terminal region of Cbs2p render the protein non-functional

The importance of the COOH-terminus is further underscored by the finding that mutational alteration of the cbs2-1 allele results in the substitution of Ile(372) by Lys

ผลจากการคัดแยกจากบทคัดย่อ 1

- 1) Subject: Translation of mitochondrial cytochrome b in *Saccharomyces cerevisiae*
Object: the Cbs1p, Cbs2p and Cbp6p
Keyword: requires
- 2) Subject: we
Object: the effect of a null mutation of YHR063C
Keyword: analyze
- 3) Subject: truncations and some directed mutations in the carboxyl-terminal region of Cbs2p
Object: the protein
Keyword: render

บทคัดย่อ 2

Minisatellite DNA is repetitive DNA with a repeat unit length from 15 to 100 bp

While stable during mitosis, it destabilizes during meiosis, altering both in length and in sequence composition

The basis for this instability is unknown

To investigate the factors controlling minisatellite stability, a minisatellite sequence 3' of the human HRAS1 gene was introduced into the *Saccharomyces cerevisiae* genome, replacing the wild-type HIS4 promoter

The minisatellite tract exhibited the same phenotypes in yeast that it exhibited in mammalian systems

The insertion stimulated transcription of the HIS4 gene; mRNA production was detected at levels above those seen with the wild-type promoter

The insertion stimulated meiotic recombination and created a hot spot for initiation of double-strand breaks during meiosis in the regions immediately flanking the repetitive DNA

The tract length altered at a high frequency during meiosis, and both expansions and contractions in length were detected

Tract expansion, but not contraction, was controlled by the product of the RAD1 gene

RAD1 is the first gene identified that controls specifically the expansion of minisatellite tracts

A model for tract length alteration based on these results is presented

ผลจากการคัดแยกจากบทคัดย่อ 2

- 1) Subject: it
Object: mammalian systems
Keyword: exhibited
- 2) Subject: The insertion
Object: transcription of the HIS4 gene
Keyword: stimulated
- 3) Subject: The insertion
Object: meiotic recombination and created a hot spot
Keyword: stimulated
- 4) Subject: A model for tract length alteration based on these results
Keyword: presented

บทคัดย่อ 3

Genetic and biochemical studies of Schizosaccharomyces pombe and Saccharomyces cerevisiae

have identified gene products that play essential functions in both pre-mRNA splicing and cell cycle control

Among these are the conserved, Myb-related CDC5 (also known as Cef1p in *S. cerevisiae*) proteins

The mechanism by which loss of CDC5/Cef1p function causes both splicing and cell cycle defects has been unclear

Here we provide evidence that cell cycle arrest in a new temperature-sensitive CEF1 mutant, cef1-13, is an indirect consequence of defects in pre-mRNA splicing

Although cef1-13 cells harbor global defects in pre-mRNA splicing discovered through intron microarray analysis, inefficient splicing of the alpha-tubulin-encoding TUB1 mRNA was considered as a potential cause of the cef1-13 cell cycle arrest because cef1-13 cells arrest uniformly at G(2)/M with many hallmarks of a defective microtubule cytoskeleton

Consistent with this possibility, cef1-13 cells possess reduced levels of total TUB1 mRNA and alpha-tubulin protein

Removing the intron from TUB1 in cef1-13 cells boosts TUB1 mRNA and alpha-tubulin expression to near wild-type levels and restores microtubule stability in the cef1-13 mutant

As a result, cef1-13 tub1Delta cells progress through mitosis and their cell cycle arrest phenotype is alleviated

Removing the TUB1 intron from two other splicing mutants that arrest at G(2)/M, prp17Delta and prp22-1 strains, permits nuclear division, but suppression of the cell cycle block is less efficient

Our data raise the possibility that although cell cycle arrest phenotypes in prp mutants can be explained by defects in pre-mRNA splicing, the transcript(s) whose inefficient splicing contributes to cell cycle arrest is likely to be prp mutant dependent

ผลจากการคัดแยกจากบทคัดย่อ 3

- 1) Subject: Genetic and biochemical studies of Schizosaccharomyces pombe and Saccharomyces cerevisiae

Object: gene products that play essential functions

Keyword: identified

- 2) Subject: cef1-13 cells

Keyword: discovered

- 3) Subject: cef1-13 cells

Object: reduced levels of total TUB1 mRNA and alpha-tubulin protein

Keyword: possess

- 4) Subject: Removing the intron from TUB1 in cef1-13 cells

Object: TUB1 mRNA

Keyword: boosts

5) Subject: cells

Preposition: through mitosis

Keyword: progress

6) Subject: their cell cycle arrest phenotype

Keyword: alleviated

บทคัดย่อ 4

A putative *Drosophila* nucleotide sugar transporter was characterized and shown to be the *Drosophila* homologue of the human UDP-Gal transporter (hUGT)

When the *Drosophila melanogaster* UDP-Gal transporter (DmUGT) was expressed in mammalian cells, the transporter protein was localized in the Golgi membranes and complemented the UDP-Gal transport deficiency of Lec8 cells but not the CMP-Sia transport deficiency of Lec2 cells DmUGT and hUGT were expressed in *Saccharomyces cerevisiae* cells in functionally active forms

Using microsomal vesicles isolated from *Saccharomyces cerevisiae* expressing these transporters, we unexpectedly found that both hUGT and DmUGT could transport UDP-GalNAc as well as UDP-Gal

When amino-acid residues that are conserved among human, murine, fission yeast and *Drosophila* UGTs, but are distinct from corresponding ones conserved among CMP-Sia transporters (CSTs), were substituted by those found in CST, the mutant transporters were still active in transporting UDP-Gal

One of these mutants in which Asn47 was substituted by Ala showed aberrant intracellular distribution with concomitant destabilization of the protein product

However, this mutation was suppressed by an Ile51 to Thr second-site mutation

Both residues were localized within the first transmembrane helix, suggesting that the structure of the helix contributes to the stabilization and substrate recognition of the UGT molecule

ผลจากการคัดแยกจากบทคัดย่อ 4

- 1) Subject: DmUGT and hUGT
Preposition: in *Saccharomyces cerevisiae* cells
Keyword: expressed
- 2) Subject: hUGT and DmUGT
Object: UDP-GalNAc
Keyword: transport
- 3) Subject: One of these mutants in which Asn47 was substituted by Ala
Object: aberrant intracellular
Keyword: showed
- 4) Subject: this mutation
Preposition: to Thr second-site mutation
Keyword: suppressed
- 5) Subject: the structure of the helix
Preposition: to the stabilization and substrate recognition of the UGT molecule
Keyword: contributes

บทคัดย่อ 5

High-affinity iron uptake by a ferrous permease in the opportunistic pathogen *Candida albicans* is required for virulence

Here this iron uptake system has been characterized by investigating three distinct activities: an externally directed surface ferric reductase, a membrane-associated PPD (p-phenylenediamine) oxidase and a cellular ferrous iron transport activity

Copper was required for the PPD oxidase and ferrous transport activities

In contrast, copper was not required for iron uptake from siderophores

Addition of iron to the growth medium repressed ferric reductase and ferrous transport, indicating homeostatic regulation

To identify the genes involved, orthologous mutants of *Saccharomyces cerevisiae* were transformed with a genomic library of *C. albicans*. CFL95, a gene with sequence similarity to ferric reductases, restored reductase activity to the orthologous *S. cerevisiae* mutant CaFTR2 and CaFTR1, genes with homology to ferrous permeases, conferred ferrous transport activity to the orthologous *S. cerevisiae* mutant

However, neither a genomic library nor CaFET99, a multicopper oxidase homologue and candidate gene for the PPD oxidase, complemented the *S. cerevisiae* mutant, possibly because of problems with targeting or assembly

Transcripts for CFL95, CaFTR1 and CaFET99 were strongly repressed by iron, whereas the CaFTR2 transcript was induced by iron

Deletion of the TUP1 regulator perturbed the homeostatic control of reductive iron uptake

Incidentally, iron starvation was noted to induce flavin production and this was misregulated in the absence of TUP1 control

The opposite regulation of two iron permease genes and the role of TUP1 indicate that the process of iron acquisition by *C. albicans* may be more complex and potentially more adaptable than by *S. cerevisiae*

ผลจากการคัดแยกจากบทคัดย่อ 5

- 1) Subject: High-affinity iron uptake by a ferrous permease in the opportunistic pathogen *Candida albicans*

Preposition: for virulence

Keyword: required

- 2) Subject: Copper

Preposition: for the PPD oxidase and ferrous transport activities

Keyword: required

- 3) Subject: copper

Preposition: from siderophores

Keyword: required

- 4) Subject: Addition of iron to the growth medium

Object : ferric reductase and ferrous transport, indicating homeostatic regulation

Keyword: repressed

- 5) Subject: Transcripts for CFL95, CaFTR1 and CaFET99

Preposition: by iron, whereas the CaFTR2 transcript was induced by iron

Keyword: repressed

- 6) Subject: Transcripts for CFL95, CaFTR1 and CaFET99

Preposition: by iron

Keyword: produced

- 7) Subject: Deletion of theTUP1regulator

Object: the homeostatic control of reductive iron uptake

Keyword: perturbed

บทคัดย่อ 6

The large GTPase dynamin (Dyn2) has been demonstrated by us and others to interact with several different actin-binding proteins

To define how Dyn2 might participate in actin dynamics in living cells we have expressed green fluorescent protein (GFP)-tagged Dyn2 in cultured cells and observed labeling of comet-like vesicles and macropinosomes

The comet structures progressed with a constant velocity and were reminiscent of actin comets associated with motile vesicles in cells expressing type I phosphatidylinositol phosphate 5-kinases

Based on these observations we sought to determine whether Dyn2 is an integral component of actin comets

Cells expressing type I phosphatidylinositol phosphate 5-kinase and Dyn2-GFP revealed a prominent colocalization of Dyn2 and actin in comet structures

Interestingly, comet formation and motility were normal in cells expressing wild-type Dyn2-GFP but altered markedly in Dyn2 mutant-expressing cells

Dyn2K44A-GFP mutant cells displayed a significant reduction in comet number, length, velocity, and efficiency of movement

In contrast, comets in cells expressing Dyn2DeltaPRD-GFP appeared dark and did not incorporate the mutant Dyn2 protein, indicating that the proline-rich domain (PRD) is required for Dyn2 recruitment

Further, these comets were significantly longer and slower than those in control cells

These findings demonstrate a role for Dyn2 in actin-based vesicle motility

ผลจากการคัดแยกจากบทคัดย่อ 6

- 1) Subject: The large GTPase dynamin Dyn2
Object: several different actin-binding proteins
Keyword: demonstrated
- 2) Subject: comet formation and motility
Object: wild-type Dyn2-GFP
Keyword: expressing

บทคัดย่อ 7

Genes encoding two distinct fatty acid delta9-desaturases were isolated from strains of the oleaginous fungus *Mortierella alpina*

Two genomic sequences, delta9-1 and delta9-2 each containing a single intron were cloned from strain CBS 528.72, while one cDNA clone, LM9 was isolated from strain CBS 210.32

The delta9-1 gene encoded a protein of 445 aa which shared 99% identity with the LM9 gene product

These proteins also showed 40-60% identity to the delta9-desaturases (Ole1p) of other fungi and contained the three conserved histidine boxes, C-terminal cytochrome b5 fusion and

transmembrane domains characteristic of endoplasmic reticulum membrane-bound delta9-desaturases

LM9 and delta9-1 are therefore considered to represent the same gene (ole1)

The ole1 gene was transcriptionally active in all *M. alpina* strains tested and its function was

confirmed by complementation of the *Saccharomyces cerevisiae* ole1 mutation

Fatty acid analysis of yeast transformants expressing the CBS 210.32 *ole1* gene showed an elevated level of oleic acid (18:1) compared to palmitoleic acid (16:1), the major fatty acid component of wild-type *S. cerevisiae*

This indicated that the *M. alpina* delta9-desaturase had a substrate preference for stearic acid (18:0) rather than palmitic acid (16:0)

Genomic clone delta9-2 (*ole2*) also encoded a protein of 445 aa which had 86% identity to the delta9-1 and LM9 proteins and whose ORF also complemented the yeast *ole1* mutation

The transcript from this gene could only be detected in one of the six *M. alpina* strains tested, suggesting that its expression may be strain-specific or induced under certain physiological conditions

ผลจากการคัดแยกจากบทคัดย่อ 7

- 1) Subject: Genes encoding two distinct fatty acid delta9-desaturases
Preposition: from strains of the oleaginous fungus *Mortierella alpina*
Keyword: isolated
- 2) Subject: The *ole1* gene
Preposition: in all *M. alpina* strains tested
Keyword: active
- 3) Subject: The transcript from this gene
Preposition: under certain physiological conditions
Keyword: detected

บทคัดย่อ 8

SSA4 is the only one of five heat-inducible HSP70 genes in *Saccharomyces cerevisiae* whose expression is restricted to conditions of stress

Comparison of the nucleotide sequences of the SSA4 gene with other HSP70 genes indicates that it diverged from its most closely related yeast homologues hundreds of millions of years ago

However, a high degree of identity has been maintained between Ssa4p and other yeast 70-kDa heat-shock proteins at the amino acid level suggesting, in light of its distinct pattern of regulation, that it performs an important function

A 44-base pair region of the SSA4 promoter containing an extended match to the conserved eukaryotic heat-shock element (HSE) is necessary and sufficient to mediate heat-inducible regulation

HSESSA4 is capable of promoting only a low level of transcription under nonstress conditions

We present evidence in support of a revised definition of the functional HSE in *S. cerevisiae*,

similar to the recently proposed modular *Drosophila* HSE

Elevated expression of several heat-shock proteins in an *ssa1ssa2* double-mutant strain has previously been reported

The SSA4 promoter is activated in this strain

The increase in expression of SSA4 caused by deletion of these closely related genes is mediated via the same upstream activating sequences that activate transcription in response to heat shock

Activation of HSE-mediated transcription by disruption of constitutively expressed HSP70 genes supports an autoregulatory model of control of the heat-shock response

ผลจากการคัดแยกจากบทคัดย่อ 8

- 1) Subject: a high degree of identity

Preposition: at the amino acid level, in light of its distinct pattern of, that it performs an important function

Keyword: maintained

- 2) Subject: We

Object: evidence

Keyword: present

- 3) Subject: Elevated expression of several heat-shock proteins in an *ssa1ssa2* double-mutant strain

Keyword: reported

- 4) Subject: The SSA4 promoter

Preposition: in this strain

Keyword: activated

- 5) Subject: Activation of HSE-mediated transcription by disruption of HSP70 genes
 Object: an autoregulatory model of control of the heat-shock response
 Keyword: supports

บทคัดย่อ 9

hsp26, the small heat shock protein of Saccharomyces cerevisiae, accumulates in response to heat and other types of stress

It also accumulates during the normal course of development, as cells enter stationary phase growth or begin to sporulate (S. Kurtz, J. Rossi, L. Petko, and S. Lindquist, Science 231:1154-1157, 1986)

Analysis of deletion and insertion mutations demonstrated that transcriptional control plays a critical role in regulating HSP26 expression

The HSP26 promoter was found to be complex and appears to contain repressing elements as well as activating elements

Several upstream deletion mutations resulted in strong constitutive expression of HSP26

Furthermore, upstream sequences from the HSP26 gene repressed the constitutive expression of a heterologous heat shock gene

We propose that basal repression and heat-induced depression of transcription play major roles in regulating the expression of HSP26

None of the recombinant constructs that we analyzed separated cis-regulatory sequences responsible for heat shock regulation from those responsible for developmental regulation of HSP26

Depression of HSP26 transcription may be the general mechanism of HSP26 induction in yeast cells

This regulatory scheme is very different from that described for the regulation of most other heat shock genes

ผลจากการคัดแยกจากบทคัดย่อ 9

- 1) Subject: hsp26, the small heat shock protein of *Saccharomyces cerevisiae*,
Object: heat and other types of stress
Keyword: accumulates
- 2) Subject: It
Object: the normal course of development
Keyword: accumulates
- 3) Subject: Analysis of deletion and insertion mutations
Object: transcriptional control
Keyword: demonstrated
- 4) Subject: The HSP26 promoter
Keyword: found
- 5) Subject: We
Object: repression and heat-induced depression of transcription
Keyword: propose
- 6) Subject: This regulatory scheme
Object: for the regulation of most other heat shock genes
Keyword: described
- 7) Subject: None of the recombinant constructs that we analyzed
Object: cis-regulatory sequences responsible for heat shock regulation from those responsible for developmental regulation of HSP26
Keyword: separated

บทคัดย่อ 10

ADP ribosylation factor (ARF) is a ubiquitous 21-kDa GTP-binding protein in eucaryotes. ARF was first identified in animal cells as the protein factor required for the efficient ADP-ribosylation of the mammalian G protein Gs by cholera toxin in vitro.

A gene (ARF1) encoding a protein homologous to mammalian ARF was recently cloned from *Saccharomyces cerevisiae* (Sewell and Kahn, Proc. Natl. Acad. Sci. USA, 85:4620-4624, 1988)

We have found a second gene encoding ARF in *S. cerevisiae*, ARF2

The two ARF genes are within 28 centimorgans of each other on chromosome IV, and the proteins encoded by them are 96% identical

Disruption of ARF1 causes slow growth, cold sensitivity, and sensitivity to normally sublethal concentrations of fluoride ion in the medium

Disruption of ARF2 causes no detectable phenotype

Disruption of both genes is lethal; thus,

ARF is essential for mitotic growth

The ARF1 and ARF2 proteins are functionally homologous, and the phenotypic differences between mutations in the two genes can be accounted for by the level of expression

ARF1 produces approximately 90% of total ARF

Among revertants of the fluoride sensitivity of an *arf1* null mutation were ARF1-ARF2 fusion genes created by a gene conversion event in which the deleted ARF1 sequences were repaired by recombination with ARF2

ผลการคัดแยกจากบทคัดย่อ 10

1) Subject: We

Object: a second gene encoding ARF in *S. cerevisiae*, ARF2

Keyword: found

2) Subject: Disruption of ARF2

Object: no detectable phenotype

Keyword: causes

3) Subject: genes

Preposition: recombination

Keyword: created

ประวัติผู้เขียน

ชื่อ

นางสาวนิลบล วังศิริกุล

วัน เดือน ปีเกิด

3 มิถุนายน 2522

ประวัติการศึกษา

สำเร็จการศึกษามัธยมศึกษาตอนปลาย โรงเรียนกำแพงเพชรพิทยาคม
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ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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