

ENDOTOXIN NEWSLETTER

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ENJOYING SAN ANTONIO: Restaurants, Shopping, and Sights

Restaurants

The Marriott Riverwalk Concierge provided the following restaurant suggestions. One star is moderately priced. Three stars is expensive.

County Line - Texas Barbeque. Casual dining. 111 West Crockett Ste #104. 210.229.1941 *

Rio Rio - Tex Mex. Casual dining. 421 E Commerce St. 210.226.8462 *

Boudro's - Southwest food. Casual dining. (This is a very busy place, so make a reservation 2 days in advance!) 421 E. Commerce St. 210.224.8484 *

Luciano Ristorante Italiano - Italian. Casual-fine dining. 849 E. Commerce, Suite 183. 210.223.0500 **

Pesca - Upscale Seafood. Casual-fine dining. 212 West Crockett Street. 210.396.5817 **

Little Rhein - Steakhouse. Very small rustic steakhouse, best for small groups of people. 418 Villita Bldg #2700. 210.225.2111 **

Biga on the Banks - Fine dining. *Gourmet Magazine* considers this restaurant one of the "top five restaurants in Texas." 203 South St. Mary's St. 210.225.0722 ***

Las Canarias - Upscale Steakhouse. Fine dining. 219 East Houston Street, 2nd Floor 10. 210.472.2600 ***

Shopping

If shopping is your fancy during meeting breaks, visit La Villita. Located on the south bank of the San Antonio River. La Villita was San Antonio's first neighborhood. It was originally a settlement of primitive huts for the Spanish soldiers stationed at the Mission San Antonio Valero (the Alamo) and is now a thriving art community. Or try Market Square, the largest Mexican marketplace outside of Mexico. Farther afield is Artisan Alley. Only a 25 minute drive from the Riverwalk area, you can shop for arts, crafts and antiques.



Seeing the Town

Take a 45 minute riverboat ride to see beautiful San Antonio (Adults: \$6.50). Or, see the city from the top of the newly reopened Tower of the Americas. After 5:00PM there is fine dining in the rotating restaurant atop the tower. Visitors can take a 4D ride and visit the observation deck for \$10; or just visit the observation deck for \$5. If you still have some time, visit the Institute of Texan Cultures to investigate the ethnic and cultural history of Texas. Admission: Adults, \$7; Sightseeing/tour groups, \$4 per person. □

A LETTER FROM THE EDITOR

Dan Rossignol,
Endotoxin Newsletter Editor

October; here we are at the "cusp" of our bi-annual meeting in San Antonio.

We have agendas and "what to do" information to publish that will hopefully convince you and your colleagues to make the trip. After all, where else can you have three days of fun and innate immunity and nothing but fun and innate immunity¹?

The JER

You may recall that we have a new JER editor, Dr. Otto Holst. On page 4, he reports the good news/bad news about the JER. It seems that the JER is really doing quite well (impact factor 2.791), but as always, needs the help of good authors submitting good, relevant research articles.

¹My apologies to Max Yusgur.

(Continued on Page 5)

Innate Immunity: Receptors, Response and Regulation

A Joint Meeting of the Society for Leukocyte Biology and the International Endotoxin and Innate Immunity Society

November 9-11, 2006

Marriott Riverwalk Hotel

San Antonio, Texas USA

<http://www.leukocytebiology.org>

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PRELIMINARY PROGRAM

Joint SLB/IEIS Meeting, *Innate Immunity: Receptors, Response, & Regulation*: November 9-11, 2006 San Antonio, Texas

THURSDAY, NOVEMBER 9

Special Topics: Symposium A: Atherosclerosis and Innate Immunity

1:00-3:00 PM

- Sam Wright
Atherosclerosis: an Autoimmune Disease of the Innate Immune System
- Caroline Genco
Gum Disease and Atherosclerosis: Disparate Diseases with Commonalities in Pathogenesis Through TLR2
- Moshe Arditi
Toll-Like Receptors and Atherosclerosis. An Emerging Link
- Peter Tobias
TLR2 and Murine Atherosclerosis

Special Topics: Symposium B: Aging and Innate Immunity

1:00-3:00 PM

- Prakash Sambhara
Age-Associated Alterations in Antigen-Presenting Cell Function
- Phyllis-Jean Linton
Defective Dendritic Cell Migration in the Aged
- Tamas Fulop
GM-CSF Induced Functions and Signalling Pathways in Human Neutrophils: Age-Related Changes
- Elizabeth Kovacs
Aging Alters Innate Immune Responses after Injury

Student/Post-doc Research Competition

3:10-4:10 PM

Keynote:

4:30-6:30 PM

- Robert Munford
Lessons from LPS: Why Gram-negative Bacteria Cause the Diseases They Do
- Robert Coffman
2006 Marie T. Bonazinga Award Winner

Poster Session 1

FRIDAY, NOVEMBER 10

Plenary I: The Role of Pattern Recognition Receptors in Immunity and Inflammation

8:00 AM-12:30 PM

- Ruslan Medzhitov
Mechanisms of TLR signaling
- Vishva Dixit
The Inflammason: a Dynamic Caspase Activating Apparatus
- Luke O'Neill
Toll-Like Receptor Signal Transduction During Infection and inflammation
- Shizuo Akira
Viral Recognition and Signaling in Innate Immunity
- Jessica Bell
Ligand Recognition in Toll-Like Receptor 3: The dsRNA Binding Site

- Doug Golenbock
Mechanism of TLR Activation
- Sankar Ghosh
NF- κ B in Innate Immunity and Inflammation

12:30-1:30 PM Special Program "Meet the NIH Program Officer" Richard Sawyer (registration required)

Symposium 1: Transcriptional Regulation in Immune Cells

1:30-3:30 PM

- Gioacchino Natoli
Control of Inflammatory Gene Expression by NF- κ B
- S. Smale
Nucleosome Remodeling and the Inflammatory Response
- Lionel Ivashkiv
Regulation of Macrophage TLR and ITAM-Dependent Responses by IFNs

Symposium 2: Chemistry & Biology of Lipid A

1:30-3:30 PM

- Ulrich Seydel
Physical Chemistry and Bioactivity of Lipid A, Lipid A Analogs, and Lipid A-like Structures: The generalized Endotoxic Principle
- Christian Raetz
Attenuated Virulence of Francisella Mutants with an Altered lipid A Structure
- Egil Lien
Evasion of Endotoxin-TLR4 Signaling and the Virulence of Yersinia pestis
- Andrew Preston
Speciation of the Bordetellae: Lipid A Modification and TLR4-Mediated Immunity

Symposium 3: Innate Immune Pathophysiology

1:30-3:30 PM

- John Harlan
Bcl-2 Proteins in Sepsis
- Tom van der Poll
Innate Immune Response to Pneumonia
- Sébastien Gibot
The Role of TREM-1 in Sepsis

Symposium 4: Immune Responses to Pathogens

3:55-5:55 PM

- Eric Pamer
Immune Responses to the Inhaled Fungal Pathogen Aspergillus fumigatus
- Robert Clark
NOX Family of NADPH Oxidases: Activation, Regulation, and Biological Roles
- Michael Smith
Syndecans and the Epithelial cell Response to Helicobacter pylori

Symposium 5: Cytokine and Chemokine Responses

3:55-5:55 PM

- Thomas Hamilton
Chemokine and Chemoattractant Receptor Expression: Post-transcriptional Regulation
- Philip Murphy
Chemokine Regulation of Atherosclerosis
- Peter Murray
Mechanisms of IL-10 Anti-Inflammatory Signaling

Symposium 6: Chemistry & Biology of Microbial Structures

3:55-5:55 PM

- Chris Whitfield
Chain-Length Control in the Biosynthesis of LPS O Antigens
- Jerry Weiss
Outer Membrane Blebs Reveal Novel Aspects of Regulation of Delivery of Endotoxin to Specific Host Targets
- Koichi Fukase
Synthesis of Peptidoglycan Fragments for Elucidation of Structural Requirements Allowing Detection by Pattern Recognition Receptors

Poster Session 2

6:00-7:45 PM

SATURDAY, NOVEMBER 11

Plenary II: Pattern Recognition Molecules (non-TLR)

8:00-10:00 AM

- Dana Philpott
Innate Immunity Mediated by Nod Proteins
- Kate Fitzgerald
Regulation and Counter-Regulation of Type I Interferon Responses
- Jules Hoffmann
Sensing and Signaling during Infections in Drosophila
- Gabriel Nunez
NOD-Like Receptors: Role in Innate Immunity and Disease

Plenary III: Endogenous Activators of Innate Immune Signaling

10:30-12:00 noon

- Jeff Platt
Endogenous Route to SIRS and Sepsis
- Ken Rock
Sensing and Responding to Cell Death
- Polly Matzinger
The Extended Family: Tissue-Specific Control of immunity

Symposium 7: Leukocyte responses to pathogens and their products

1:00-3:00 PM

- Gordon Brown
Dectin-1 and Anti-Fungal Immunity
- Keiko Ozato
Real Time Action of IRF-8 and Other IRF Members in Dendritic Cells
- Richard Flavell

Symposium 8: Alarmins and other endogenous danger signals

1:00-3:00 PM

- Joost Oppenheim
Diverse Endogenous Peptide Alarmins Guard Us from Danger
- Ann Marie Schmidt
RAGE and its Ligands... Adaptive Immunity to Diabetic Complications: Nearing Full Circle

Symposium 9: Microbial & Endogenous Agonists

1:00-3:00 PM

- Corrine Grangette
Anti-Inflammatory Properties of Probiotics: Role of Bacterial Cell-Wall Components and Interaction with Dendritic Cells
- Alan Cross
The Emerging Role of the MyD88-Independent Pathway in IL-1beta

Symposium 10: The Manipulation of Immune Responses

3:20-5:20 PM

- Genhong Cheng
Crosstalk Between Innate Antiviral Response and Host Metabolism
- Christopher Karp
Counter-Regulation in the Innate Immune System: Restraining TLRs
- David Mosser
The Heterogeneity of Activated Macrophages

Symposium 11: Microbial & Endogenous Agonists

3:20-5:20 PM

- Nicolas J. Gay
Molecular Mechanisms of Signalling by LipidA and Imidazoquinolines through Toll-Like Receptors 4 and 8'
- Judith Hellman
The Role of the MyD88-Dependent and MyD88-Independent Pathways in Synergy, Priming, and Tolerance Between Microbial TLR Agonists

Symposium 12: Innate Immune Therapy

3:20-5:20 PM

- Jory Baldrige
TLR4 Agonists as Vaccine Adjuvants and Monotherapeutics
- Nilofer Qureshi
The Novel and Important Role of Proteasome in Innate Immunity
- Dan Rossignol
Clinical Activity of a TLR4 Antagonist
- Mark Tomai
The Immune Response Modifier (IRF) AldaraTM
- Odin Naderer

7:00 PM Bar-B-Q Banquet! At the Marriott Destinations Ranch (transportation will be provided for all)

NOTE: There will be oral presentations from selected abstracts in most symposia.

Note: Detailed program available at the IEIIS website.

JER News from the Editor

Dr. Otto Holst, Editor-in-Chief

There is good news and bad news. The good news is that the impact factor of *Journal of Endotoxin Research* continues to rise; in 2005 it was **2.791** (vs. 2.042 in 2004)!! All contributors, our Editorial Advisory Board and in particular Ulrich Seydel as Editor-in-Chief of the years 2004-2005 should take credit for this excellent result, and I thank you all very much for your continued efforts to publish top quality papers in the *Journal of Endotoxin Research*. It will not be easy to continue with such high standards for the Journal, but we must all accept this challenge and do our best to even improve quality.

This leads me to discuss the less satisfying news; our Assistant Editor, Dr. Patricia Sanchez-Carballo, recently summarized the actual situation of paper submission, and it looks dissatisfying – only 14 original papers have been submitted to *Journal of Endotoxin Research* from January through August 2006 (vs. 25 in January - August 2005), and 5 reviews (3). How do we attract more “clients”?

For sure, one vehicle is the latest impact factor of *Journal of Endotoxin Research* which is depicted on the website. Online submission of manuscripts and pre-publishing of accepted papers would also help. We should do it and my hope is that we will be able to realize it rather soon.

In the long run, a change of the Journal’s name would help, an issue that has been discussed for at least the last two years. I take it up again since in my opinion it is very important. A new name like the proposed *Innate Immunity* would immediately signal a broadened scope of the Journal and, thus, would interest a higher number of scientists in the Journal and would increase the number of submitted manuscripts. I have discussed this matter again with our publishing partner Maney recently, and I am very glad and most grateful that Maney is willing to act in concert.

But in the short term, you must help to commission papers in order for us to maintain the quality of the JER and continue readership. Please ask colleagues in your research networks to submit appropriate manuscripts to our Journal (please include the website address and do not fail to mention the impact factor). And do not forget that we need not focus on endotoxin- there is a wide and complex world of innate immunity out there to be reckoned with! Thank you very much for consideration - also I will be happy to receive other ideas from you! □

CONTROVERSY CORNER

by the Editor

Why don't scientists argue/defend alternative positions or make stronger points to the contrary to speakers at meetings? Am I wrong or were people “in the old days” more willing to stand up and defend a contrary position at a meeting- especially after an alternative viewpoint has been presented? Why don't good discussions emanate from good controversial talks anymore? Are people too polite? Too timid? Unwilling to defend alternative research in open forums? Are the times allowed for discussion after a talk too short? Is everyone asleep?

A REPLY: Another factor, in line with the points that Dr. Levin raised, is that the field itself has become quite complex, and the presentations oftentimes involve topics that only specialists in that particular area can fully appreciate. This seems like a different situation than what existed in the “old days” of endotoxin research, when the field was focused on questions of a more fundamental nature, such as: *What is the structure of endotoxin? Does the endotoxic activity in LPS reside in the lipid or the polysaccharide domain? Is there a receptor for LPS, and, if so, what is it?* These questions were no doubt of direct interest to most scientists in the endotoxin field, so there was likely to be a greater number of informed opinions, and therefore a greater likelihood of controversy, at the meetings in that era. -- Kent Myers

EDITOR'S NOTE: *Is that the secret? Have we just gotten too specialized to be able to argue about what someone else has presented...does this mean that all we have to do to avoid controversy (and get lots of funding) is to get so specialized that no-one will dare argue with our point of view??*

Other replies?

Is there just not enough controversy out there to talk about?

Send your comments or topics of discussion to the newsletter editor, if you feel like raising an issue ... otherwise, I may just have to sell this space to the advertisers.

A Letter from the Editor

(Continued from Page 1)

This journal is ours, and only innate immunity researchers can keep it useful, so please think about doing your part.

No controversies out there??

As a follow-up to my claiming that I can barely “get together a newsletter”, I am a bit disappointed in the response (or lack thereof) to my controversies queries that I thought begged for a reply! My cry of “Can’t we make this newsletter a forum to discuss (briefly) controversial topics related to our work?” must

have fallen on deaf ears. I guess in this world of instant messaging, e-mails and blogging, that there are just no good controversies out there that need to go to print!

Despite all this e-media, isn’t there something to be gained by going into print?

On a good note, however, Dr. Noveck’s discussion on the use of endotoxin challenge in healthy volunteers has generated several verbal replies, and one written comment (see below). □

From the In-Box:

Readers are encouraged to send technical questions related to innate immunity or endotoxin to this newsletter. We will publish your questions and any responses that are received. When submitting your question, please let us know if you do not wish for your name to be included with your question or response.

A RESPONSE TO:

Human Research with Endotoxin -- Should We Continue Using It in Healthy Volunteers?

Dr. Rossignol:

Dr. Noveck’s admonition about continued human research with endotoxin strikes a responsive chord with me.

As long ago as 1994, I reviewed human responses to bacterial endotoxin (Circ. Shock 43:137, 1994) and one of my purposes in doing so was to collate the data to forestall duplicating studies which were happening at that time. Moreover, some studies only looked at selected responses, ignoring other relevant observations that could have been performed on the same at-risk volunteers.

Any future human studies should only add to existing knowledge, not rehash it and Dr. Noveck’s admonition to use tried and true doses for endotoxin challenge studies *should be kept upper most in mind.*

Thank You.

Robert Burrell (retired)
Morgantown WV

Editor’s note:

In regards to the reason why the point on use of endotoxin challenge in healthy volunteers was raised, results from the disconcerting study performed using a superagonist anti-CD28 monoclonal antibody have now been published (Cytokine Storm in a Phase 1 Trial of the Anti-CD28 Monoclonal Antibody TGN1412)¹. And the authors state: “Documentation of the clinical course occurring over the 30 days after infusion offers insight into the systemic inflammatory response syndrome in the absence of contaminating pathogens, endotoxin, or underlying disease”.

Due to the nature of the study, the severe immune reaction was quite well characterized. Can we learn something from this? What do we learn if we compare the responses observed in this study to what we see in experimental endotoxemia and even sepsis?? (eg. CRP levels after administration of TGN1412 peaked at about 30 times what we see in a healthy volunteer endotoxin challenge²).

Who might be more qualified to comment on this than members of IEIIS? Is there someone out there who would care to comment?

Innate Immunity: Receptors, Response and Regulation

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November 9-11, 2006

Marriott Riverwalk Hotel

San Antonio, Texas USA

Meeting: <http://www.leukocytebiology.org/>

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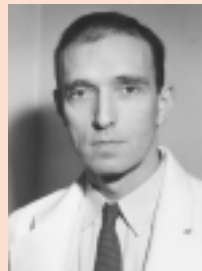
¹ Suntharalingam G, Perry MR, Ward S, et al: Cytokine Storm in a Phase 1 Trial of the Anti-CD28 Monoclonal Antibody TGN1412. N Engl J Med 355:1018-1028, 2006

² Lynn M, Rossignol DP, Wheeler JL, et al: Blocking of Responses to Endotoxin by E5564 in Healthy Volunteers with Experimental Endotoxemia. J Infect Dis 187:631-639, 2003

SOCIETY NEWS

New IES Members

Sachiko Akashi-Takamura Tokyo JAPAN	Kindra Kelly-Scumpia, BS Univ of Florida Gainesville, FL USA
Aranya Bagchi, MD Massachusetts General Hospital Boston, MA USA	Tomaz Koprivnjak, PhD Univ of Iowa Coralville, IA USA
Michelle Beidelschies Case Western Reserve Cleveland, OH USA	Meta Kuehn Duke Univ Durham, NC USA
Katherine Brittingham, MA, PhD USA MRIID Frederick, MD USA	Hsin-Chih Lai Taipei TAIWAN
Leah Cole Univ of Maryland, Baltimore Baltimore, MD USA	LiLi Southwestern Medical Center at Dallas Plano, TX USA
Julia Eitel Berlin GERMANY	Chia-Chen Lu Taipei TAIWAN
Asmaa El Hamidi Universite Paris-Sud Orsay FRANCE	Meenakshi Malik, DVM, PhD Albany Medical Center, CIMD Glenmont, NY USA
Hongkuan Fan, PhD Medical Univ of S Carolina Charleston, SC USA	Kathleen McCabe Albany Medical Center Troy, NY USA
Floris Fransen Laren THE NETHERLANDS	Lilia Mijares Yale Univ East Haven, CT USA
Jessica Hankins E Tennessee State Univ Johnson City, TN USA	Quan Nhu, BS Univ of Maryland Germantown, MD USA
Masahito Hashimoto, PhD Kagoshima Univ Kagoshima JAPAN	Masato Nishida Tokyo JAPAN
Sandra Jabre Univ of Maryland, Baltimore Baltimore, MD USA	Swamy Polumuri Univ of Maryland Baltimore, MD USA
Nitin Jain, PhD Univ of Tennessee Knoxville, TN USA	Bikash Sahay, DVM, PhD Albany Medical Center, CIMD Albany, NY USA
Christian Jobin, PhD Univ of N.Carolina, Chapel Hill Hillsborough, NC USA	Kari Ann Shirey Univ of Maryland, Baltimore Baltimore, MD USA



F.B. Bang Award

Jack Levin

The Frederik B. Bang Award was initially established in 1985 by Dr. Stanley Watson, the founder of Associates of Cape Cod. However, because of lack of continuous funding, it was not awarded for the 2nd time until 1996 at the IES Conference held in Nagoya. In 2000, the Trustees of the Stanley Watson Foundation agreed to provide an endowment which would support the Bang Award in perpetuity.

The following is the description of the Bang Award:

The Frederik B. Bang Award was established by the Stanley Watson Foundation to recognize a substantial body of significant research accomplishment by an outstanding senior investigator, whose contributions to the endotoxin field extend over many years.

The recipient of the Bang Award is chosen by the Bang Award Committee, the members of which are selected by the Executive Committee of the I.E.I.I.S.

The award honors Dr. Frederik B. Bang who spent his entire faculty career at the Johns Hopkins Univ. School of Medicine. He was an extraordinary biomedical investigator with an enormous range of interests which included hepatitis, parasitic diseases, and pertinently, bacterial endotoxins. The overarching theme of his investigations was the study of defense mechanisms, and he was especially insightful in the use of marine organisms to study biological phenomena which had clinical significance.

The Bang Award consists of a plaque and a cash prize. Previous recipients of the Bang Award are:

Jack Levin	1985
Chris Galanos	1996
Sheldon Greisman	2000 (awarded in 2002)
Ernst Rietschel	2002
Shoichi Kusumoto	2004

Siquan Sun
JNJPRD
San Diego, CA USA

Dongxu Sun, PhD
Weill Medical College of Cornell Univ
NY, NY USA

Carmelita Tuazon, PhD
GWUMC
Washington, DC USA

Tushar Varma, PhD
Univ of TX
Galveston, TX USA

Sonja von Aulock
Konstanz GERMANY

Rajwardhan Yadav
Univ of Connecticut
Health Center
Farmington, CT USA

Janine Zahlten
Charite
Berlin GERMANY

WELCOME!

Also, welcome back to all past members who have re-joined!

POSITION ANNOUNCEMENT

The University Of Missouri Kansas City School Of Medicine is seeking highly qualified applicants to fill a recently vacated Endowed Chair faculty position in the Shock Trauma Research Center with academic appointment as either Associate Professor or Professor of Surgery and Basic Medical Science.

The successful candidate will have a doctorate degree in medicine, biochemistry, immunology, cell biology or related disciplines and published research in the field of shock or trauma. It is expected that the individual recruited to fill this position will have an established track record of independent, peer-reviewed research grant support from federal or national funding agencies, and will be funded at the time of appointment to this position. It is further expected that the successful candidate will have an established leadership role in the field of shock and trauma and will continue to contribute in that capacity at UMKC.

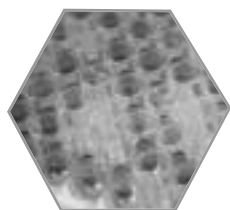
Current faculty appointed to the Shock Trauma Research Center at UMKC School of Medicine have funded research interests in both hemorrhagic and septic shock and are funded through multiple grants from the NIH, the Office of Naval Research and the American Heart Association. It is expected that the individual recruited to this position will have complementary research expertise to ongoing research in the Center. Significant startup funds and research laboratory space are available.

This position will remain open until filled. Interested applicants are requested to provide a copy of their curriculum vitae to: Christopher J. Papasian, Ph.D.; Chair of the Search Committee, Dept. of Basic Medical Science, UMKC School of Medicine, 2411 Holmes St., Kansas City MO, 64108; email: papasianc@umkc.edu.

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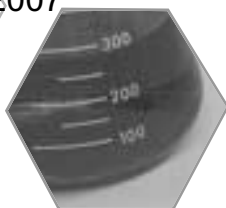
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Where to Ask ...

Need to update your address information? Wondering why you have not received a copy of the newsletter? (It probably has not been mailed yet!) Want to pay your dues but are not sure how? You can get answers to these and all other questions related to your IES membership from the following individuals:

Email us at info@ieiis.org or contact one of these individuals directly:

Membership:

Dr. J. Chris Hodgson (UK)
IES Membership Chairman
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Email: Membership@ieiis.org

Dues and subscription questions:

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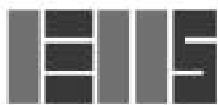
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