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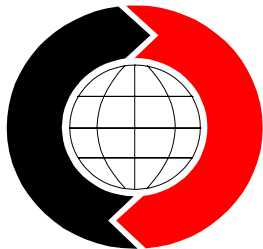
# *ISCM Planning Meeting Program Review*

**February 5 – 6, 2002**

**James B. Rice, Jr.**

**Director - Integrated Supply Chain  
Management Program**

**Massachusetts Institute of Technology**



# Meeting Objectives

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- Primary
  - Review ISCM Program activities 2001
  - Plan ISCM Program activities 2002
    - With ISCM sponsor input and consensus
    - Research Agenda 2002
    - Collaboration (event) Plans 2002
    - ISCM Structure, Recruiting additional sponsors
  - Enlist sponsor participation
    - Research project(s)
    - Event planning and hosting
- Secondary
  - Provide a research review of 2001 projects supported



# Today's Agenda

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- Review & Assessment of ISCM 2001
  - **Financial, Research, Events, Issues**
  - **Researcher Briefs and Reviews**
    - Supply Chain Visualization Project Team
    - Jim Rice – Network Master
    - Jim Rice – Creating Lasting Value Through SC Collaboration
- Adjourn @ 5:00 pm
- Dinner at MIT Faculty Club



# Tomorrow's Agenda

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- **Planning ISCM 2002**
  - **Research Agenda 2002**
    - Options
    - Research Agenda Factors, Development and Alternatives
  - **Collaboration Planning 2002**
    - Event Planning Objective(s)
    - Factors, Theme
- Lunch @ 11:30 am
  - Working Lunch, through 1:00 pm
- Adjourn 1:00 pm



# Review & Assessment of ISCM 2001

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- Financial
- Research
- Events
- Learnings
- Issues
- Vision/Mission/Value Exchange



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# Review of 2001 ISCM Finances



# ISCM Financial Structure

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- Funding
  - 100% from ISCM sponsors
  - Pays for Director
    - Fixed cost – recent sharing
  - Pays for research investments
  - \$40K annual sponsorship
    - Single year commitment
- Funding structure allows freedom to work with other groups
  - Financial contributions as well as content & access contributions are exchange collateral

# Review of 2001 ISCM Finances

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- Funding received
  - 2001 Revenues: \$260K received
- Expenses incurred (actual)
  - 2001 Est. Expenses: \$245K
- Net Position 12-01
  - Estimated carryover into 2002: \$15K
  - 2001 Research Projects funding stretched into 2002





# 2001 Statement (unadjusted)

Sponsorship Fees	\$260,000
Director Salary incl OH	\$77,179
Support Staff incl OH	\$19,891
Travel Expenses	\$1,939
Conference Expense & Commitments	\$2,761
Matls, Office Supplies & Services	\$1,936
Telephone, Facilities	\$2,932
Project - Fine Clockspeed	
Project - SC Process Handbook	
Project - SC Visualization	\$80,000
Total Expenses	\$186,638
2000 Carryforward	
Net Cash Flow	\$73,362



# 2001 Statement (Adjusted for Transfers)

Adjustments to reflect accrual rather than cash basis

Sponsorship Fees	\$260,000
Director Salary incl OH	\$139,679
Support Staff incl OH	\$39,891
Travel Expenses	\$17,939
Conference Expense & Commitments	\$2,761
Matls, Office Supplies & Services	\$1,936
Telephone, Facilities	\$2,932
Project - Fine Clockspeed	
Project - SC Process Handbook	
Project - SC Visualization	\$40,000
Total Expenses	\$245,138
2000 Carryforward	
Net Cash Flow	\$14,862

2001 salary & OH understated due to transfers out made for '00 non-ISCM efforts

2001 travel expenses charged to lower OH account

2001 commitment was \$40K, both 2000 & 2001 commitments hit in 2001



# 2002 Financial Forecast

Sponsorship Fees	\$200,000
Est. Op. Exp. before Research Funding	\$267,885
2002 Net	-\$67,885
Pre-2002 Net Available (uncommitted surplus)	\$128,000
2002 Total Expected Available	\$60,115

To avoid spending into \$128K 'surplus' ....

- Need 1+ additional sponsor
- Charge off Director time additional 25%
- Increase funding from sponsors



# Estimate of 2002 ISCM Finances

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- Estimated Funding Available
  - 2002 Revenues anticipated from current sponsors: \$200K
  - Net cumulative available carry forward into 2002: \$128K
- Expenses
  - 2002 Est. Expenses before research investments: \$268K
- Net Position 1-02
  - Net available for program operation: \$328K
  - Net available for research investments: \$60K
    - Entails spending down all funds
    - Making \$60K research investments dependent upon receiving anticipated funds



# Planning Implications – Finances

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- Limited investment decision for now
  - Deployment of Director
  - Assess and develop research alternatives
- Assess funding sources
  - \$40K annual sponsor fee
  - Additional sponsors
  - Current sponsor role in recruiting



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# Review of 2001 ISCM Research



# Review of 2001 ISCM Research Agenda

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- No 'out-of-pocket' investments made in 2001
- Extended projects through 2001
  - Clockspeed On-Site Sessions with Prof. Charlie Fine
    - Apply Clockspeed to sponsor cases, develop new analytical tools & processes to assess the role of the Internet & the importance of information systems integration on SC design
  - Supply Chain Visualization Project
    - Access to researchers and developments of tool to visualize supply chain performance through the use of a physical interface connected to a system dynamics model & knowledge repository
- Initiated new projects conducted by ISCM
  - Network Master
  - Creating Lasting Value Through SC Collaboration (CLV)

# Summary of Project Learnings

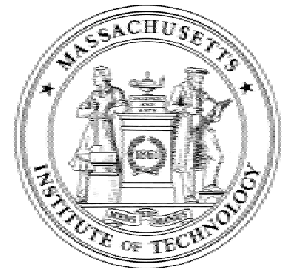
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- Clockspeed
  - Developed new Service Supply Chain analyses & tools
    - Service Supply Chain Analytical Tools and Models
  - Demonstrated application of new tools for Service SC
    - Helix Technology
    - P&G Web-Order Management
- Network Master
  - Illustrated limitations in SC vs. SC vision, and identified vision of potential multi-tier coordination
  - Highlighted importance of working with adjacent tiers vs. chain-wide focus
- CLV
  - Developed learnings for collaborating with adjacent tiers
- Supply Chain Visualization



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# SCV Project Review



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# Network Master Project Review



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# CLV Project Review



# Consortia Research Current Best Practices

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- High sponsor involvement produces exponential benefits
  - Participation in project development and field research
  - Benefits to both the sponsor and project results
  - 2001 ex. – Intel (suggested Stanford CLV project), P&G (CLV study, hosted event, Clockspeed session), Helix (Clockspeed session), Siemens (Clockspeed session)
- Leverage research funds with ongoing research
  - Pool funds with other initiatives for greater impact
  - 2001 ex. – SC Visualization, Fine & Clockspeed
- New projects – invest in research considering the ‘author’
  - Akin to commissioning a book
  - Track record, productivity
- Research entails a process of discovery
  - Research, not consulting - creating new knowledge
  - 2001 ex. – Fine exposes Service Supply Chain, Network Master uncovered SC vs. SC limitations

# Research Agenda Options

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- Multiple options exist for research investment
  - Applied research project vs. concept development
  - Independent funding vs. leveraged funding
  - Large single investment vs. portfolio of projects
  - Broad business issue vs. focused problem
  - Degree of sponsor participation on each project
    - Single company vs. multiple



# Planning Implications – Research

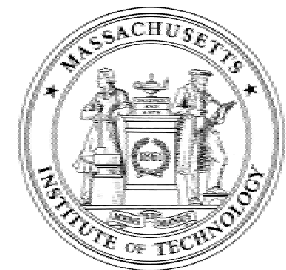
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- Research agenda options as choices for a consortia
  - This year and into the future
  - Portfolio of the various options
- Recognize context of our consortia
  - Multiple companies, different agendas, joined together for a common interest in SC
  - Consortia structure entails funding constraints
    - Need consensus among sponsors for research agenda choices
    - Consider soliciting additional funding for additional work



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# Review of 2001 ISCM Events



# Events – Evolution of process & purpose

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- 1995-1997
  - Focused on learning about the sponsor supply chains (supply chain reviews at sponsor sites)
- 1998
  - Shifted to theme-based, topic-focused (plan, make, source, deliver) events targeted to non-supply chain groups
  - Focused on sharing learnings among sponsors, identifying best practices on several supply chain topics
- 1999
  - Shifted to topic-focused events on mixture of supply chain and business management topics, leverage events with other MIT consortia and research groups, open discussion sessions
  - No central theme identified, sponsor-driven event topics
- 2000-2001
  - Events and audioconferences to balance travel & interactions
  - Heavier emphasis on research





# 2001 ISCM Event Schedule

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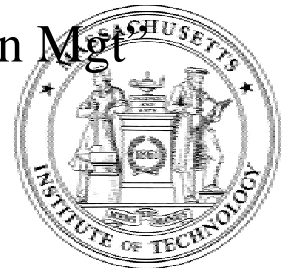
- February 1** ISCM Best Practices Collaborative Meeting at MIT  
“Innovations in Sponsor Supply Chains”
- February 2** Joint ISCM - Leaders for Manufacturing Program at MIT  
LFM Intern Research Knowledge Review
- June 19-20** eClockspeed Research Visit to Helix (Prof. Charlie Fine)  
ISCM Exchange Meeting & Research Review at MIT
- Oct. 30** “Innovations in Supply Chains”  
ISCM Event Hosted by P&G, Cincinnati, Ohio  
(P&G’s Consumer Innovation Center)
- Oct. 31** sClockspeed Research Visit to P&G  
Prof. Charlie Fine & Customer Service Supply Chain



# 2001 ISCM Support Activities Schedule

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- February 20** ISCM AudioConference  
Review of Innovations by ISCM Sponsors (Intel)
- March 1** Clockspeed Research Visit to Siemens  
Prof. Charlie Fine
- May 14** Supply Network Coordination Symposium  
Sponsored by KLICT Research – The Netherlands
- May 15** ISCM AudioConference  
Prof. Ellen Christiaanse – Univ. of Amsterdam  
“From Static Supply Chains to Dynamic Supply Webs”
- Nov 2** ISCM AudioConference  
“Global Terrorism and the Impact on Supply Chain Mgt”  
Prof. Yossi Sheffi, Prof Barry Posen, and  
Dr. Jonathan Byrnes



# 2002 Event & Activities Schedule

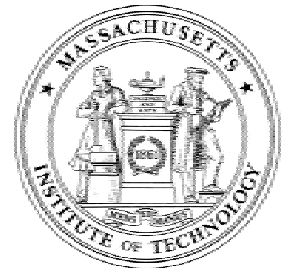
(proposed draft)

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|--------------|--|
| January 10   | “Dynamic Pricing in the Supply Chain”<br>MIT CTS Affiliates Program in Logistics Symposium |
| February 5-6 | ISCM Key Contacts 2002 Planning Meeting  |
| April 9-10   | Symposia Invitation<br>MIT Research Directors Conference Supply Chain Track                |
| May 21-22    | Best Practices Collaborative Meeting at MIT  |
| June         | Clockspeed Research Visit to ISCM Sponsor (TBD)  |
| Oct. 15-16   | Best Practices Collaborative Meeting at MIT  |
| Dec. 3-4     | ISCM Key Contacts 2003 Planning Meeting  |

Additional Audio-Conferences to be added

Note: Consider holding one event at an ISCM sponsor site.



# 2000 ISCM Event Schedule

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- January 27-28      “Managing Change in the Supply Chain” and  
Leaders For Manufacturing (LFM) Knowledge Review
- June 12-13        “Future of Supply Chain, E-Business and the Internet  
ISCM Event Hosted by Intel, Chandler, Az.  
(Fine - MIT, Lee - Stanford, Cohen - Wharton)
- Sept. 13-15        ISCM Research Review and Workshop  
Research Colloquium with LFM
- Nov. 28-29        ISCM 2001 - Program Planning  
Sponsor Key Contacts & MIT Researchers



# 2000 ISCM Support Activities Schedule

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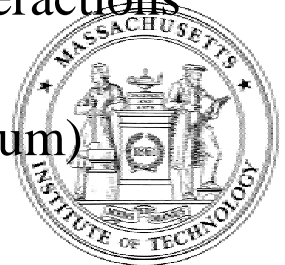
- February 15      ISCM AudioConference  
                         ‘eClockspeed’ Project Planning – Prof. Charlie Fine
- April 18            ISCM AudioConference  
                         “Smart Practice Knowledge Network” – Lucent Tech.  
                         “Fireball Initiative” – P&G
- June 1              Research Visit to P&G – Prof. Charlie Fine
- June 5              Research Visit to Lucent – Prof. Charlie Fine
- October 17        ISCM AudioConference  
                         Dr. Fred Hewitt – MIT CISR  
                         “Why Demand Pipelines are better than Supply Chains”



# Consortia Events Current Best Practices

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- Committed sponsor participation
  - Desirable to have full involvement in planning
    - Ensures events relevant to sponsor interest
    - Sponsor ‘co-planner’
  - Critical to have full participation (representation at least) at each event
  - Active involvement in discussion
    - Provides deeper insight, leads to involvement in other activities
- Event schedule, participation and size
  - 1.5 to 2 day optimal duration
    - 1 day max shared with other groups, 2+ hours unscheduled for open discussion
  - For symposia-type events, maximum 30-35 participants for top benefit
- Event planning
  - 3-4 core exchange events at MIT (or sponsor site) plus other interactions
  - Advance plan best for all, with ‘theme’
  - Key contact planning sessions requires key contacts (at a minimum)



# Planning Implications – Events

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- Choices for 2002
  - Mix of ‘travel’ events and other interactions
    - Sponsor supply chain reviews?
    - European event?
  - Theme, or multiple ‘point’ topics
  - Co-sponsored events with other groups possible
- Sharing and collaboration potential
  - How much and what amount of this is desired?



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# Review of 2002 ISCM Value Exchange





# Review of ISCM Mission & Value Exchange

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- Two stated objectives
  - Accelerate implementation of SCM at sponsor companies
  - Advance the state-of-art of SCM
- ISCM delivers these through
  - ISCM-funded Research Projects
  - Quarterly Collaboration - Exchange Events
  - Annual Executive Event
- Learn from other research consortia
  - Smaller programs serve a focused agenda, sponsor input
  - Larger programs serve a broad agenda, sponsor input
  - Multi-year commitment
  - Focus is on the research



# Reference Benchmark for Value Exchange

<u>Initiative</u>	<u>\$</u>	<u>Sponsors</u>	<u>Value Exchange</u>
ISCM	\$40K/yr	Ltd to 12, no competitors, consultants	ISCM-driven research agenda, 4-6 exchange events per year
E-Business@MIT	\$300K/yr, 3-yr commit	Open	Access to research output, Invites to misc. events, Input to Res. Direction
Leaders For Mfg	\$1M to join, \$125K/yr	Open (consultant?)	6-mo internship, multiple planning, intern rev mtgs
Media Lab	\$250K/yr, 3 yr commit	Open	Ltd license to intellectual property dev through ML consortium, ltd. # symposia
Auto-ID Center	\$200+K/yr	Open	Participation and access to technology developments

# Summary Assessment of ISCM Value Exchange

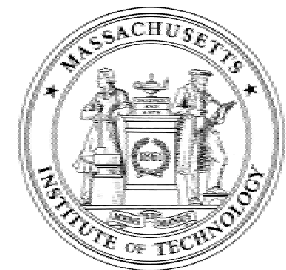
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- Potential for higher impact exists
  - Increased, more active participation in long term research agenda
- Sponsor benefits appear to be a function of...
  - Attendance at events (this may seem obvious.....)
  - Consuming research shared
    - Sharing around the company
    - Generating discussion with researcher to understand, apply learnings
  - Willingness to engage
    - Non-event visits to MIT to explore research interests
    - Commitment of resources to join research projects
  - Clarity of your company's interests and needs
  - Take advantage of our resources
    - Theses, Researchers, Ongoing projects
- ISCM is a High-touch Program



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# Review of 2002 ISCM Issues



# ISCM Issue – Long Term Plan

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- Where do you want ISCM to go in the future?
  - What is our long-term vision?
    - Purpose
    - Research and activities
    - Sponsor composition
  - What do we want ISCM to evolve into?
    - Shift from year-to-year planning to multi-year?
  - Harvesting strategies.....
- Future vision should drive other key choices
  - Planning horizon and cycle
  - Research agenda
  - Event and activity plans
  - Deployment of Director



# ISCM Issue – Deployment of Director

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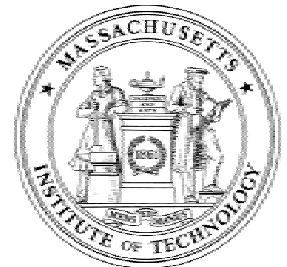
- Choices for ISCM Director
  - Develop plans to move towards long-term vision
  - Focus efforts on ....
    - Research
    - Developing, initiating and supporting research projects
    - Marketing, recruiting new sponsors
    - Event planning
  - Role requires all four.....
    - Which is the priority focus?
    - Increased role for sponsor will help.



# ISCM Issue – Program Structure and Size

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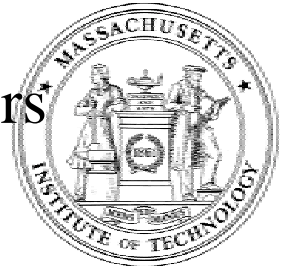
- Program Structure and Size
  - Currently reaching lower limit on number of sponsors
  - Event participation limit of effectiveness (30-35)
  - Limited membership & low cost limits research funds available
  - Annual funding requires ‘rework’ effort, limits ability to make research commitments for longer-term projects
    - Although it is useful to review progress
- Considerations
  - Multiple-year sponsorship agreement
  - Enlist sponsors in recruiting efforts
- Discussion



# Consortia Current Best Practices

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- Take active role giving input on deployment of Director
  - Deploy to meaningful work that sponsors desire
- Play a role in recruiting
  - Peer companies
  - Suppliers, customers, service providers
  - Provide contacts, introduce to other party, identify a desirable outcome from having the other party join ISCM
- Engage broad set of parties at your firm
  - Participation in ISCM events
  - Participation in ISCM research
  - Connect with and explore possibilities with researchers





# Planning Implications – Events

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- Choices for 2002
  - Mix of ‘travel’ events and other interactions
    - Sponsor supply chain reviews?
    - European event?
  - Theme, or multiple ‘point’ topics
  - Co-sponsored events with other groups possible
- Sharing and collaboration potential
  - How much and what amount of this is desired?



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# Planning 2002 ISCM Research



# 2002 Research Agenda Draft

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- Continue 2001 research projects into 2002
  - CLV
  - Clockspeed
  - SC Visualization access
- One new project
  - Monsanto Seed Returns – Demand Bubbles
- Other projects if warranted by interest and if funding available
  - Projects for Director
  - Projects for other researchers



# Research Alternatives – Internal Control

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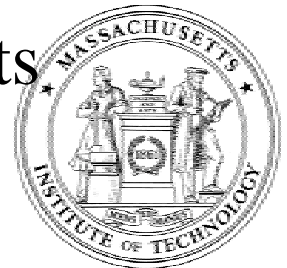
- Auto-ID Technology & SCM – A Disruptive Technology (Rice)
- Market Power and the Supply Chain (Hines, Rice)
- CLV – Monsanto (Rice)
- Organization Dynamics for Internal Collaboration (Rice)



# Research Alternatives – External

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- Impact of Global Terrorism on SCM (Sheffi)
- Collaborative contracts and managing risk in the SC (Sheffi, Graves)
- Alternatives for SCM Resource Allocation (Malone, Hines, McAdams, Rice)
- Defining the Essence of Third Party Logistics (Papadopoulou)
- Alternatives for SCM Resource Allocation (Malone, Hines, McAdams, Rice)
- Quantifying the SC Vis model for linked benefits (Malone, Hines, Ishii, Rice)



# Research Alternatives Discussion

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- Going forward
  - Need additional funds to expand current research agenda
    - Additional sponsors
    - Delay new research investments
    - Increase funding levels
  - Need participation and direction for developing options
  - Need process for selecting
- Discussion



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# Planning 2002 ISCM Events



# Planning 2002 ISCM Events

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- Design of future event slate
  - Continue mix of ‘travel’ and other events?
    - Other – Audioconferences, research site visits
    - Share events with other MIT group(s) in 2002? (I.e. with LFM)
  - Supply chain review(s) at sponsor site(s)
  - Theme?
  - ‘Futures’ event
- Frequency, Timing, Locations
  - 3-4 events per year
  - Avoid quarter-end months?
  - January, April-May, September-October, Nov-Dec?
  - Non-sponsor, non-MIT location
    - Ahold in The Netherlands





# Other

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- ISCM
  - This is your program, make it what you want it to be
  - Exponential benefits for those who expend energy
- Visiting scholar initiative
  - On-campus researcher



# Summary

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- Identify follow up items, responsibilities, timing
- List choices for 2002
  - ISCM Vision, Long-term plan
  - Research agenda decision making process
  - Research plans, focus
  - Event plan
  - Program structure, operations
  - Deployment of Director
- List outstanding items

