



THE INSTITUTOR

News and updates from the Institute of Industrial Relations

July, 1996 volume I, number 2

University of California, Berkeley

Dear Friends and Colleagues,

I am pleased to announce the establishment of IIR's first fellowship fund for graduate student support—The Lloyd Ulman Labor Economics Fellowship Fund. Like many of you, I have benefited enormously from Lloyd Ulman's sage advice, incisive wit, and invaluable support over the years. Together, we can create a fellowship for graduate students to carry on the high academic standards and humanitarian values exemplified by Ulman during his career at IIR. The Fund's creation is an important event for IIR, and the full details are outlined inside this newsletter.

When reflecting on IIR's activities and achievements as our 50th year comes to a close, I am especially gratified by the response we have received from former graduate students, staff, and visiting scholars. We thank all of you who so enthusiastically responded to our announcement of the annual fund, and to those of you who wrote to us. For those of you have not yet had the time to reply, IIR looks forward to hearing from you.

I am also pleased with our program to raise research funding for our affiliated faculty. We are continually submitting new research proposals and receiving new funding. Recent awards have been received by Prof. Michael Burawoy (the new Chair in Sociology) and IIR Associate Director, Prof. Jim Lincoln.

Looking to the future, IIR faculty have been discussing renaming the Institute so that our name better reflects our intellectual interests and activities in work and organization. This summer we will finalize our plans to change the name, which will be announced in the next issue of the Institutor. The new name will signal IIR's mission to stay at the forefront of research and policy into the next century.

IIR has planned many programs for the 96/97 academic year. Inside this issue you will find announcements of upcoming conferences, faculty seminar series, planned cooperative associations with research centers on campus, and even the establishment of a new international labor center. Please attend these activities when you can, stop by IIR when you are in the area, or stay in touch by e-mail (or any other means.) I hope to see many of you this coming year at IIR as we continue to share the intellectual excitement of expanding the boundaries of knowledge and applying our findings to policy and practice.

Warm regards,

Clair Brown, Professor of Economics
Director, IIR

Competitive Semiconductor Manufacturing Human Resources (CSM-HR) Project Puts Out New Report

A second interim CSM-HR report will be released in July, a synopsis of which is presented here. The report is divided into two parts:

- Development, collection, and analysis of a HR questionnaire to sixteen fabs on three continents about their employment (i.e., HR) and training systems. How the component parts of an HR system work and the relationship of the HR system (rather than individual parts) to firm performance are analyzed.
- Analysis of key questions, or

continued on page 2

In this issue ...

- Semiconductor HR project releases report
- IIR announces fellowship fund in honor of Prof. Lloyd Ulman
- Focus: labor-management participation
- IR Journal special issue

NEW REPORT FROM CSM-HR PROJECT, CONTINUED



CSM-HR group leader, Clair Brown

focus studies, on how the HR systems function. These case studies include analysis of skills and careers at one major U.S. company, inter-firm knowledge sharing, and managing creativity and control in innovation. Completed focus studies on a statistical analysis of the initial interview data, team organization and process, and human capital investment in learning-by-doing are also included.

The CSM-HR group is led by IIR Director Clair Brown, and includes Prof. Michael Reich as well as graduate students Melissa Appleyard, Jumbi Edulbehram, Dan Rascher, and Vince Valvano. Past members have included the late Adjunct Professor Vinay Sohoni, postdoctoral fellow David Bowen, and graduate students Diane Bailey, Nile Hatch, Baruch Saeed, and Linda Sattler.¹

Preliminary Conclusions

The survey's preliminary results confirm the main conclusion reported in the first CSM-HR report: *high performing fabs will have a human resource system with integrated, consistent parts and the system will be tailored to function in a specific environment.*

The researchers found that successful systems not only include a seamless interplay of internal resources, but also encour-

age the identification and incorporation of appropriate external knowledge and know-how. The effectiveness of any particular system will depend on its environment—the product market, economic conditions, and the institutional and cultural system in which the company operates.

The CSM-HR study starts with the premise that “best practice” can take more than one path. One set of “best practices” does not necessarily exist for all environments. In fact, more than one HR system may perform well in any particular set of circumstances, since trade-offs may exist between the component parts of a system. However, not all HR systems are internally consistent, and not all HR systems function equally well. In the former case, firms may inadvertently create “hybrids” that use incompatible components and result in unintended consequences. In the latter case, some HR systems may not adapt adequately or rapidly enough to changes in the environment or management may attempt to import one innovation in HR practices without ensuring that other changes are made to keep the system integrated and consistent.

Summary of Findings and Job Prospects

The semiconductor industry provides a lot of training across all occupations, from operators to engineers. This training is necessary because workers are involved in continuous problem-solving in an industry that is regularly introduc-

ing new processes or new products and automating. After an average of a month of initial training, workers are receiving training about half the work time during the first year; the majority of this training is on the job. In subsequent years, about one-quarter of the time is spent in training.

Training of technicians is more likely to be correlated with fab performance than training of operators and engineers. The research team believes this reflects the importance of machine up-time in determining machine productivity and the large variation in actual machine up-time observed across fabs.

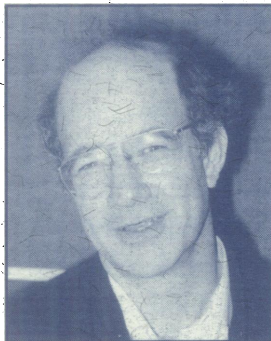
Operators are involved in fairly high skilled procedures, including various types of statistical process control and equipment maintenance activities. Compared to operators in traditional manufacturing jobs, the operators in semiconductors oversee a highly technical process and undertake relatively complex technical tasks. Most operators are involved in data collection and monitoring, but the level of operator involvement declines as the difficulty of the task increases. The level of operator involvement in problem solving is usually limited to identifying the nature of the problem and notifying technicians or engineers. In a few fabs, operators are involved in performing some routine maintenance. Overall, operators perform tasks that require training and skill development. How-

Continued on page 6

IIR Faculty Garner Research Grants

The National Council for Soviet and East European Research (NCSEER) has awarded Michael Burawoy, Professor of Sociology, \$52,000 for a research project which focusses on the effects Russia's trajectory from state socialism to capitalism in the northern Russian republic of Komi has had on the timber and coal industries, two of the republic's three primary industries. Professor Burawoy will continue his field research with his collaborator, Professor Pavel Krotov. Krotov heads the Department of Sociology, Institute of Economics and Social Problems of the North, at the Komi Science Center.

Prof. Michael Burawoy, an affiliated faculty member of IIR, has recently been named Chair of the Dept. of Sociology.



The researchers will gather new data this summer in the northern Komi Republic, an area approximately the size of California with a population of 2 million. They will look at what Burawoy describes as, "the uneven industrial involution in the mining (coal) and wood industries;" both the industries have seen a decline, but the timber output has had by

WHAT WORKS AT WORK

IIR Announces a Special Issue of **INDUSTRIAL RELATIONS**, Summer 1996

In the next few weeks, President Clinton will meet with business leaders to discuss "responsible management." At the same time, executives are struggling to cut costs, raise quality, and become more efficient at everything they do. The ongoing debate concerning what makes up good management reflects in large part the lack of high-quality research into what workplace practices are effective. The past two decades have witnessed considerable experimentation and research on new work practices and human resource policies. Nevertheless, we still do not understand basic questions such as: Why have businesses adopted them? What has been their impact on performance?

A special issue of the journal *Industrial Relations* reviews the newest research on "What Works at Work." Specific articles examine the causes and effects of management innovations in automobiles, apparel, machine-tool operations, and in the nation as a whole. An introductory review article surveys the evidence from case studies, studies within a particular industry, and large cross-industry studies covering much of the nation's workforce.

Managers are often frustrated by the bewildering array of advice coming from academics. Happily, this issue reflects a growing consensus that, in spite of the many difficulties of studying effective

management, results from a variety of research methods agree on what works. The volume as a whole reaches four conclusions:

- Innovative human resource management practices can improve business productivity, primarily through the use of systems of related work practices designed to enhance worker participation and flexibility in the design of work and decentralization of managerial tasks and responsibilities. There are no one or two "magic bullets" that are the work practices that will stimulate worker and business performance. Work teams or quality circles alone are not enough. Rather, whole systems need to be changed.
- New systems of participatory work practices have large, economically important effects on the performance of the businesses which adopt the new practices. The most innovative firms appear able to enjoy better outcomes in the workplace (lower turnover, higher quality, and higher productivity), and on the bottom line (higher profits, and higher stock market values).
- A majority of contemporary U.S. businesses now have adopted some forms of inno-

Continued on page 5

LABOR - MANAGEMENT PARTICIPATION CONFERENCE SPARKS DEBATE

By Kirsten Snow Spalding



Kirsten Snow Spalding, Esq. is a labor policy specialist at IIR's Center for Labor Research and Education. She researches and writes on labor policy issues, supervises graduate students engaged in union policy research, and runs programs, seminars and conferences for unionists. Ms. Spalding, a former practicing attorney, is also a labor policy advisor. She recently participated in the drafting of South Africa's new Labor Relations Act, and she has written extensively on international and comparative law issues and labor policy issues.

IIR's Center for Labor Research and Education hosted a conference, entitled "Unions Participating in Labor Management Partnerships," on May 16, 1996 at the Clark Kerr Campus of UC Berkeley. The event was co-sponsored by IIR's California Public Employee Relations Program and the Federal Mediation and Conciliation Service. Over 125 union leaders attended workshops taught by Union leaders from IBEW, HERE, CWA, UNITE, CSEA, SEIU, Steelworkers, UFCW, AFSCME, OCAW, Machinists and the AFL-CIO.

Participants from 25 different unions discussed union positions regarding labor-management partnerships. At the opening plenary

session, moderated by Institute of Industrial Relations Professor Harley Shaiken of the Graduate School of Education, the participants and speakers expressed frustration with the myriad of "cooperative" programs that they had been involved with over the past ten years. Over the course of the day's eight workshops, speakers and participants explored many different answers to his question.

Steve Weingarten from UNITE argued with his workshop participants that labor-management participation programs present an opportunity for unions to propose an organizing agenda to management. HERE Local 2 president Mike Casey, management lawyer Stuart Korshak, and

...participants and speakers expressed frustration with the myriad of cooperative programs...over the past ten years.

Debbie Moy of the Joint Labor Management Hotel Project in San Francisco, talked about their ways of solving problems quickly, utilizing worker committees. UAW Local 2244 President Charles

Curry talked about the change in productivity since the joint labor-management participation program came into the Fremont auto manufacturing plant. From his perspective the partnership not only saved jobs, it saved the plant.

Less sure of the merits of new forms of bargaining was panelist Leon Taylor of the Sacramento Police Officers Association. Mr. Taylor described the failure of a year-long experiment in interest-based bargaining which began with trust-building exercises between the City and the Union, and ended with a complete breakdown in bargaining and the failure of even a mediated contract.

As the enthusiastic turnout for the conference demonstrated, labor-management partnerships is a hot subject for unions. And yet, as the conference participants demonstrated, there is no easy model that will work for all industries. As IIR Director Clair Brown pointed out in her welcoming address, the conference was just the beginning of on-going IIR work on this subject. The Labor Center has gathered the names of conference participants who are interested in participating in discussion groups and a research task force to explore the possibilities for labor-management partnerships. For those who would like to be involved in this work, the Labor Center welcomes inquiries: 510/642-0323.

INDUSTRIAL RELATIONS Journal's Special Issue

Continued from page 3

vative work practices aimed at enhancing employee participation such as work teams, contingent pay-for-performance compensation, or flexible assignment of multi-skilled employees. However, only a small percentage of businesses have adopted a full system of innovative work practices comprised of an extensive set of these work practice innovations.

- The diffusion of new workplace innovations is limited, especially among older U.S. businesses. Firms face a number of obstacles when changing from a system of traditional work practices to a system of innovative practices, in-

cluding: the abandonment of organizational change initiatives after limited policy changes have little effect on performance, the costs of other organizational practices that are needed to make new work practices effective, long histories of labor-management conflict and mistrust, resistance of supervisors and other workers who might not fare as well under the newer practices, and the lack of a supportive institutional and public policy environment.

Because different research designs have their own particular strengths and limitations, we highlight as especially noteworthy those results which emerge consistently from different studies and

summarize themes on which a considerable body of work agrees. Much more than a typical symposium introduction, this article presents a critical review of the strengths, weaknesses, and results of research on what works at work.

Industrial Relations is a publication of the Institute of Industrial Relations, University of California, Berkeley. The *IR* special issue was sponsored by the National Center for the Workplace and the Sloan Foundation. Readers who would like to request a copy of "What Works at Work," or subscribe to *Industrial Relations* may contact Blackwell Publishers, at 1-800-835-6770.

Bob Redlo Named Chair of Labor Center



Robert L. (Bob) Redlo was recently named Chair of the Center for Labor Research and Education. As Chair, Mr. Redlo's responsibilities will include oversight of the Center's many and varied programs, serving as community liaison to Bay Area unionists, developing new programs and securing funding for them. Bob Redlo came to California and IIR from New York where he recently served as an adjunct faculty member at Cornell University's NYS School of Industrial Relations. His topics of instruction included labor-management participation, contract administration, dispute resolution, and analysis of contemporary labor issues. On the union side, Redlo served as the Regional Director for New York's ACTWU for

whom he coordinated bargaining efforts, and developed education and training programs. Mr. Redlo's plans for the Labor Center include a video-conference program on current labor issues as well as a series of conferences on global organizing.

The Institutor

We welcome your comments and suggestions. Please send them to the Institute, attn: Editor. Email: Komiza@uclink.berkeley.edu

Editor: Mary Kay Stuvland

Managing Editor: Torrey Shanks

IIR Establishes the Lloyd Ulman Labor Economics Fellowship Fund

IIR has initiated its first-ever named scholarship fund, the *Lloyd Ulman Labor Economics Fellowship Fund*, the income of which will be used to support UC Berkeley graduate students who propose to undertake research in labor economics. Fellowships from the fund, which has been created with close to \$3,000 in gifts, will be awarded after the Fund reaches its goal of \$50,000.



Professor Emeritus Lloyd Ulman introduced Mr. Jack Henning who, together with the Hon. George Shultz, was honored at a special dinner organized for them on the occasion of IIR's 50th anniversary celebration in 1995.

The Fund was named in honor of Professor Lloyd Ulman, UC Berkeley Professor Emeritus of Economics, and former IIR Director from 1963 through 1982. Professor Ulman has mentored many graduate students through their doctoral degree programs in Economics while conducting his own seminal research in the areas of comparative labor market prob-

lems and collective bargaining.

Professor Ulman's most recent work, co-authored with UC Berkeley Economics Professors Clair Brown and Michael Reich, and Professor Yoshi Nakata of Doshisha University is entitled, *Work and Pay: Employment and Wage Systems in the U.S. and Japan*. The book, which compares Japanese and American approaches to work force

management and wage determination, will be published this fall. At the insistence of his co-authors, royalties from the book will go towards attaining the financial goal of the Fellowship Fund.

IIR Director Clair Brown announced that IIR is honored to have such a distinguished emeritus faculty member, and is especially pleased to have the opportunity to acknowledge Ulman's years of distinguished service to IIR, as well as his and important and lasting contributions to the field of Labor Economics. "Lloyd will always be remembered by his students and colleagues for his unfailing support and deep insights into their own research projects," Brown emphasized.

Any gift to the Institute may be designated for support of this important fund which will help to continue Berkeley's pre-eminence in the field of labor economics through the financial support of its graduate students.

Continued from page 2

ever, operators are still limited in their skill development and career growth, as well as wage growth, unless they become techs.

All production workers in the large Japanese semiconductor companies are on a career ladder that combines operator and technician tasks, training, and skills. After ten to fifteen years of experience, Japanese electronics production workers have technical skills and job tasks comparable to a technician, although the occupational category does not exist. In the U.S., the operator jobs are usually separated from the technician jobs, and an operator does not necessarily (or usually) become a technician. After obtaining an AA degree, an operator can typically move up to a technician's job in the U.S. Technicians must also undertake specific company-provided training (including on the job training in certain processes.) The requirements are rigorous and require a lot of non-paid time and commitment. Korean fabs provide an interesting contrast to both the Japanese and U.S. cases, since operator jobs are strictly segmented from technician jobs.

For a copy of this report and/or a list of reports related to this study, contact Celeste Newdrough: celesten@esrc.me.berkeley.edu; (tel) 510/643-1825; (fax) 510/643-8982.

¹ The CSM-HR project began July, 1993 as an adjunct to the CSM multi-year research program which was designed to study competitive semiconductor manufacturing worldwide. The CSM main study is a joint program of the College of Engineering and IIR under the sponsorship of the Alfred P. Sloan Foundation. --The researchers and IIR wish to thank the Sloan Foundation for its support of this project.

A note on designating gifts

Your gift may be designated for our newly-established fellowship fund, the Lloyd Ulman Labor Economics Fellowship Fund. Your gift will go directly into this Fund with its targeted financial goal of \$50,000. When fully funded, this important legacy in Professor Lloyd Ulman's name will annually award over \$2,500 in fellowship monies to a graduate student whose major field of research is Labor Economics. To designate your gift, simply check the box indicated on the Friends' Gift Form on the remit envelope.

The debut of IIR's annual membership program, Friends of IIR, was announced in the first issue of the *Institutor* this past winter. The strong response from faculty and former students of IIR has been both encouraging and gratifying. We sincerely thank those of you who have been the first to step forward and show your support for the programs and research of the Institute!

For those of you who have not yet had time to respond, we encourage you to become a part of our IIR community. Please help us reach our funding goals for education, research and community service with your gift. Your generosity will enable us to grow, and assist us in providing unique services and training as IIR prepares for its next 50 years. We look forward to hearing from you soon!

(Gifts at the Benefactor level and above may be pledged, and payment sent in two installments.)

Friends of IIR

Leadership Circle	\$1,000 +
IIR Associates	\$500 - \$999
Benefactors	\$100 - \$499
Supporters	\$25 - \$99

Send your check, made payable to the Regents of the University of California, to IIR/ 2521 Channing Way/UC Berkeley/ Berkeley, CA

Thank you for your generosity and support!

IIR warmly thanks our new donors, listed below, for their generosity and continuing support. Those who have given previously are designated with ♦.

IIR Associates:

- ♦ Prof. Clair Brown
- ♦ Prof. Yoshifumi Nakata
- ♦ Prof. Michael Reich
- ♦ Prof. and Mrs. Lloyd Ulman

Benefactors:

- ♦ Ms. Bonnie Bogue
- Dr. Peder Inge Furseth

Supporters:

- Ms. Candace Howes
- Dr. Endo Koshi
- ♦ Prof. David Matza
- Joan-Marie Shelley,
- United Educators of
- San Francisco

947720-5555. It is a policy of the University of California that a small portion of the gifts and/or income therefrom is used to defray the costs of raising and administering the funds. Donations are tax deductible to the extent allowed by law.

A note on matching gifts

Many corporations promote the development of colleges and universities by matching contributions from their employees, retirees, board members, and other affiliated individuals. If your current or former company has such a program, please indicate your company name on the enclosed remit envelope.

Levels of Giving

Supporters will receive the *Institutor*, IIR's publication featuring information about recent and upcoming events, news regarding the activities of IIR units and researchers, and stories about the work of faculty, graduate students, and alumni. Additionally, separate mailings and invitations will be sent to Supporters about special events sponsored by IIR both on- and off-campus.

IIR Associates receive the benefits noted above, and also select a special thank-you gift of either an IIR mug created in honor of the Institute's 50th anniversary, or a brass key chain imprinted with the IIR logo.

Benefactors of IIR will receive, in addition to the above, annual special invitations to dinners and evening programs held in conjunction with IIR-sponsored events, including conferences and symposia.

Leadership Circle donors, in addition to the above-mentioned benefits, also become members of the University's Robert Gordon Sproul Associates. As such, they are invited to the Chancellor's annual black tie banquet, and to luncheons prior to Cal's home football games. The names of Leadership Circle members appear in Cal's Annual Report of Private Giving.

IIR FACULTY AWARDS

Continued from page 3

far the greater descent, falling 54% between 1991 and 1995.

Preliminary research will analyze the fate of the workers in the two industries, the intensification of domestic work, and family strategies for coping, as Burawoy and Krotov test and develop the theory of involution that attempts to understand how it is that an economy eats away at its own foundations by transferring re-

sources from production to exchange. Their concept of involution is designed to explain the rapid decline of the Russian economy as a process of self-destruction. Burawoy proposes a bleaker-than-standard theory of involution which suggests that markets themselves accelerate the decline of the Russian economy by siphoning off resources from agriculture and industry into an overbloated sphere of exchange. The team will examine the valid-

ity of the involution thesis, and how it may cast light not only on the present and future trajectory of coal and timber, but on the Russian economy in general. Using the economy of Komi, their work will test the dynamics of change. Burawoy believes it is vital to study the regions where the effects of the center's successive policies are often more clear. Preliminary findings will result in early articles before the team returns to the field in 1997.

UNIVERSITY OF CALIFORNIA, BERKELEY
Institute of Industrial Relations
2521 Channing Way, #5555
Berkeley, CA 94720-5555

NON-PROFIT ORGANIZATION
U.S. POSTAGE PAID
UNIVERSITY OF CALIFORNIA

IR01

Terry Huwe
Institute of Industrial Relations
2521 Channing Way, #5555
CAMPUS