

**ANNUAL REPORT  
1986-1987**

**Harold L. Votey, Jr.  
Director**

**COMMUNITY AND ORGANIZATION RESEARCH INSTITUTE**

**University of California, Santa Barbara**

**August 1987**

# COMMUNITY AND ORGANIZATION RESEARCH INSTITUTE

## Staff

Harold L. Votey, Jr., Director  
Perry Shapiro, Associate Director  
Terence R. Smith, Associate Director  
Jeanie Cornet, Administrative Assistant  
Irene McDaniel, Principal Clerk  
Joan Dandona, Senior Word Processing Specialist

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James Pellegrino, Chairperson (Graduate School of Education)  
James Cronshaw (Biological Sciences)  
Roberta Klatzky (Psychology)  
Brian McCloskey, Graduate Student Representative (Economics)  
Carroll Pursell (History)  
Terence Smith (Computer Science)  
Jon Sonstelie (Economics)  
Stephen Weatherford (Political Science)

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DIRECTOR  
Harold L. Votey, Jr.  
Research IV  
.50% FTE

ASSOCIATE DIRECTOR  
Terence R. Smith  
Research III

ASSOCIATE DIRECTOR  
Perry Shapiro  
Research IV

SPECIAL RESEARCH PROJECTS

ADMINISTRATIVE ASSISTANT  
Jeanie Cornet  
1.0% FTE

GRANTS ADMINISTRATION

SENIOR WORD  
PROCESSING SPECIALIST  
Joan Dandona  
50% FTE

PRINCIPAL CLERK  
Irene McDaniel  
1.0 % FTE  
(.50% G.A.,  
50% Extramural Funds)

GENERAL  
RESEARCH  
PROGRAM

CALIFORNIA HEALTH  
DATA RESEARCH  
FACILITY  
Ronald L. Williams  
Director

CENTER FOR THE STUDY  
OF SPATIAL COGNITION  
AND PERFORMANCE.  
R. Klatzky J. Pellegrino  
T. Smith, Co-Directors

CENTER FOR  
DECISION SCIENCE  
David Messick  
Perry Shapiro  
Co-Directors

## THE DIRECTOR'S STATEMENT

The 1986-87 fiscal year represents the second highest in CORI history in terms of extramural funding. While CORI clients were unable to best the record of the previous year that reflected a growth of 73.3 percent over the year before, this year's total of funding announced reached \$1,182,676. This does not include awards on 6 proposals that are effective July 1, 1987 or later for an additional total of \$390,312. This level of achievement is consistent with CORI's long-term growth path that has averaged greater than 20 percent growth per annum. The number of awards fell one below the previous year for a total of 24.

### CORI'S ROLE IN PRODUCING INTERDISCIPLINARY RESEARCH

CORI's original charge was to "serve as a major resource for basic research in the social sciences with faculty participation in interdisciplinary research." There are two dimensions to this charge. In the past, the easiest challenge to meet has been to serve as a major resource for basic research in the social sciences. Encouraging truly interdisciplinary research has been the more difficult task, however, it is one for which we have increasingly shown improvement.

Table 1 indicates the breadth of participation in CORI projects by faculty, staff and students over the year. Figure 1 indicates progress from year to year and the long run upward trend in acquiring extramural support. Since its inception, CORI has maintained an average annual growth rate in support acquired of 20 percent.

All of us who are involved in the day-to-day operation of CORI feel that we can be justly proud of this growth record. At the same time, we are aware that the real credit goes to the clients we have had over the years who have produced imaginative proposals followed by sound basic research. It is one of the rewards of being a part of a dynamic campus that this long run growth record prevails.

The role of CORI's staff is to create an atmosphere in which the difficulties and occasional trauma of generating and submitting proposal in a bureaucratic system can be held to tolerable levels while the probabilities of success remain high. To that end, we provide space and services for proposal writing and ultimately to make the research itself move more easily. One of our tasks has been to work continually to bring to the attention of potential new clients the services we offer in CORI. Another has been to attempt to convince potential proposal writers of the merits of involving research from other disciplines so that results present a kind of balanced perspective that might otherwise be lacking. CORI's success in being an interdisciplinary operation is illustrated in Table 2. Approximately 37 percent of the projects currently funded involve participants from more than a single discipline. In terms of the dollar amount of extramural funding, the proportion comes closer to 50 percent, however. In large measure, the credit for gains on this front go to the people who are developing research in cognitive science that, by its very nature, is an interdisciplinary concept.

As is apparent from viewing Figure 1, the average amount of funding per grant has been rising substantially, while the number of projects has tended to level off. This is a tribute to the quality of the CORI client group who have been increasingly successful in acquiring support for their research.

### THE BREADTH OF CORI RESEARCH

The range of topics investigated by CORI clients has tended to broaden over the years to produce the picture represented by Table 2. One can get greater detail by looking at the list of projects in Appendix A-1.

While the list in A-1 speaks for itself in terms of the breadth of activities in which CORI is involved, it is worthwhile to note the continuity that is represented by current funding. For example, Walter Mead continues with energy related research, an area to which he has successfully applied himself for a

TABLE 1

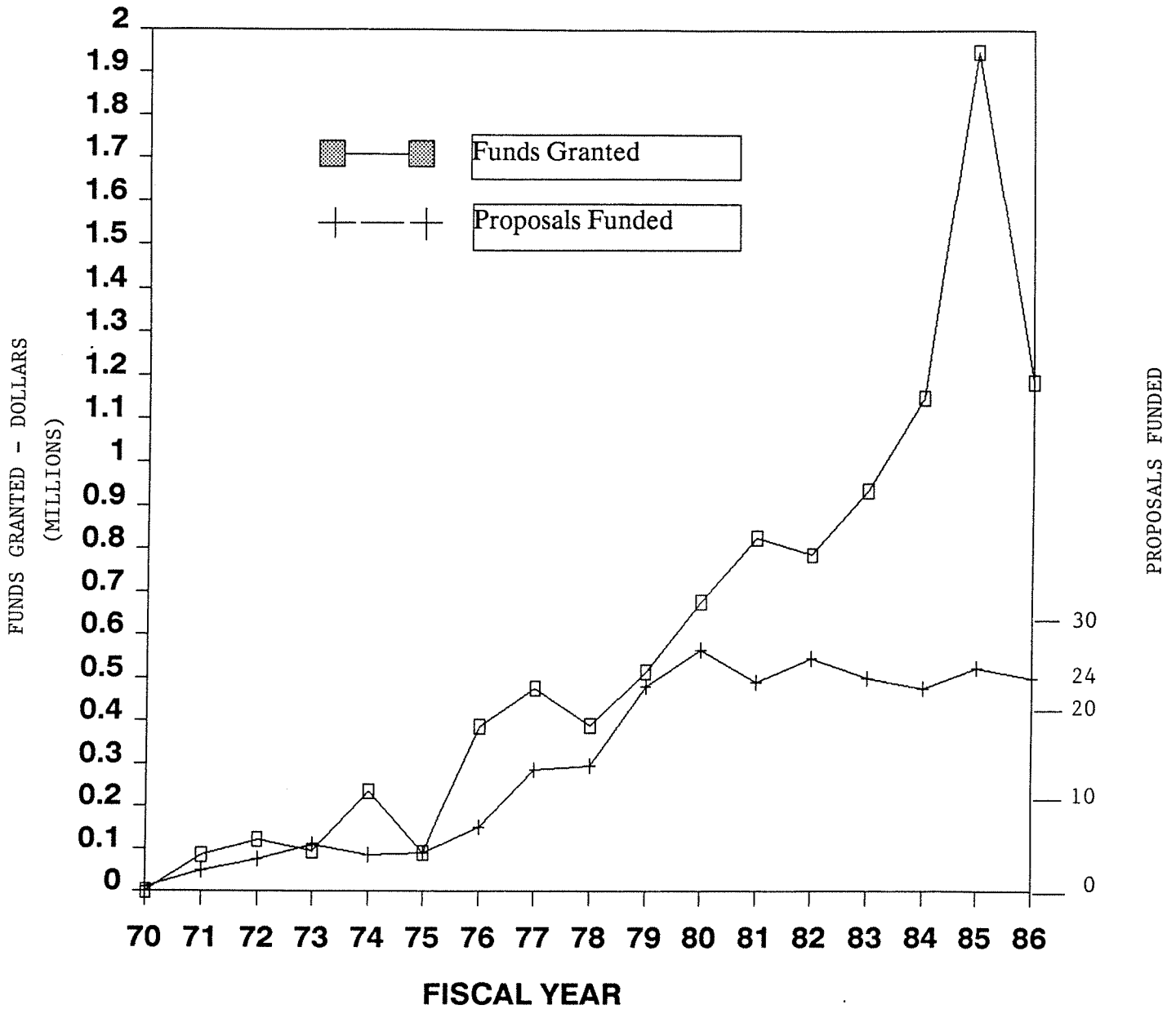
Personnel Affiliated With CORI

	<u>81/82</u>	<u>82/83</u>	<u>83/84</u>	<u>84/85</u>	<u>85/86</u>	<u>86/87</u>
<b>A. <u>Extramural Funds</u></b>						
Faculty	32	36	33	26	20	16
Professional Researchers	6	5	3	3	1	1
Specialist	2	3	2	2	6	6
Postgraduate Researchers	10	2	8	5	6	3
Graduates	27	23	22	32	16	14
Undergraduates	8	6	15	9	10	4
Fellowships	4	4	7	6	1	1
<b>B. <u>University Funds</u></b>						
Administrative	5	5	3	4	4	4
Technical	2	1	1	13	11	8
Clerical	8	2	7	2	5	5
Professional				1		

# Figure 1. COMMUNITY AND ORGANIZATION RESEARCH INSTITUTE

## Historical Pattern of Funds Granted

### And Number of Successful Proposals \*



\* Not including intramural funds for special projects and programs.

# TABLE 2

## CORI Research Projects and Discipline Involved in 1986/87\*

	Bio-Science	Computer Sci.	Economics	Education	Environ. Studies	Geography	History	Law	Political Sci.	Psychology	Sociology
Artificial Intelligence						X				X	
Business Cycles			X							X	
Cognitive Science				X						X	
Child Health Data Base	X	X	X								
Crime Studies			X								
Crime Control Theory			X								
Data Base Management		X	X			X					
Decision Science			X			X				X	
Expert Systems and Knowledge Based Info-Systems			X			X					
Energy Systems											
Geographic Information						X					
Health Economics	X		X								
Health Information Systems	X	X	X								
History Using Computer Technology as a Tool							X				
Human Behavior and Robotic Systems										X	
Labor Markets			X								
Migration			X								
Mono Lake Biology	X		X								
Navigation Without Sight				X						X	
Optimum Growth			X								
Phloem Transport	X										
Predictive Likelihood Techniques			X								
Public Finance			X								
Spatial Behavior and Knowledge						X				X	
Water Resource Use			X								
Work and Family											X

\*Discipline Involvement is defined on basis of personnel being based in or having formal training in discipline



considerable number of years. George Borjas continues to be involved with issues of labor force discrimination and migration. Llad Phillips and Harold Votey have extended their research on labor market opportunities and crime to include effects of investment in education on the choice to seek legitimate versus illegal sources of income. Ronald Williams remains one of the more successful clients in terms of continuity and the magnitude of support for his work on the factors contributing to neonatal and perinatal survival and the development of data systems for the collection of the public health data on which research is based. Warren Hollister's work on the computer base from the Domesday Book along with his associate Robin Fleming continues to be supported.

The project being supervised by Daniel Botkin for the California Department of Fish and Game on the impacts of continuing export of water from the Mono Lake Basin is nearing completion. The work will unquestionably have a major impact on legislation and the regulation of water use in the basin. Another project that has already produced important results in terms of national recognition is the work by William and Denise Bielby on men's and women's competing commitments between employment and the family.

The area that continues to have the greatest promise as a research area within CORI is that of cognitive science. That work is located in the Center for the Study of Spatial Cognition and Performance. The leaders in this work continue to be Roberta Klatzky, James Pellegrino, and Terence Smith in Psychology, Education, and Computer Science. Other disciplines involved include Geography and Linguistics and, if one takes into account participation seminars, a considerably broader list of disciplines. An interesting project funded this year that gives one a notion of the range of interests of the groups is "Analysis of Navigation Without Sight, involving Jack Loomis, Reginald Golledge, Sally Doherty, Roberta Klatzky, and James Pellegrino.

The work in cognitive science is rapidly evolving toward becoming an academic program as a consequence of the broad interest on campus and the outstanding success of the research level. The same group who have demonstrated success in research are the source of energy moving in this direction. Already, several departments have elected to make cognitive science an emphasis in their Ph.D. programs. The research seminars that continue as an ongoing activity will provide the basis for course work for that emphasis. It is not often that research success is so quickly translated into academic advances and it is to the credit of this group that such rapid progress has been made.

## **CORI SERVICES**

Providing services to research clients continues to be the justification for CORI's existence. Most important is assistance in getting out proposals promptly to meet agency deadlines. That task can almost seem an insurmountable one to busy researchers. CORI has a striking record of success in meeting deadlines even when there are lengthy tasks to be completed including word processing, budget planning and the acquisition of an often lengthy list of approvals. We realize that successfully getting proposals to funding agencies is the necessary first condition for any researcher to be a successful CORI client. This work is supervised by Jeanie Cornet who provides detailed budgets and oversees all aspects of proposal submission. She is assisted by Joan Dandona for word processing. Irene McDaniel helps keep this process working smoothly, but her primary role comes later in providing accurate and up to the minute accounting for all projects administered by CORI.

A major concern of most researchers is to be able to acquire space in which the research can be conducted. CORI maintains excellent space for research assistants and provides help in acquiring space unique to most grant requirements. In addition, CORI can provide space for research seminars, site meetings with funding agencies, and for staff meetings of research teams. Two seminar type meeting rooms are available in North Hall, plus the Pellish Room, a deluxe space for important visitors from off campus and for special meetings for the planning and initiation of multidisciplinary projects.

An important aspect of proposal submission, grants management and research reporting is the facility to get out printed materials quickly and easily. CORI maintains a high quality word processing operation

## Community and Organization Research Institute

with an IBM PC/AT that is being used for word processing and developmental work. The AT is coupled with a Hewlett Packard laser printer to provide quality output for research papers and reports. Accounting is presently done on an IBM PS2/50 with a Model 30 used by the AA also serving as a backup for accounting. All of this equipment, including two dot matrix printers is linked so that any machine has access to any of the printers. In addition, CORI is slated to acquire a new photocopier to replace a machine that has not been providing satisfactory service.

**RESEARCH IN PROGRESS 1986/87**

**Title:** A Benefit Cost Analysis of Public Utility Commission Rate Regulations: The Case of Electrical Power

**Grant No.:** UERG

**PI:** Walter Mead, Research Economist

**Abstract:** Support has been provided to estimate the private cost of electrical power regulation as incurred by both the Public Utility Commission and the private utilities that must comply with PUC regulations.

**Title:** Analysis of Navigation Without Sight

**Grant No.:** PHS 1 ROI EY07022-01

**PI(s):** Jack Loomis

Reginald Golledge

Sally Doherty, Research Psychologist

Roberta Klatzky, Research Psychologist

James Pellegrino, Research Psychologist and Educator

**Abstract:** Support has been provided to conduct a series of experiments to study how blind and blindfolded observers represent their surroundings and how they use this information to navigate.

**Title:** Automated Perinatal Information System

**Grant No.:** CA HLTH 86-89393

**PI:** Ronald L. Williams, Research Economist

**Abstract:** Continued funding for development and enhancement of Automated Vital Statistics System (AVSS), which has been developed for collection of data on pregnancy, labor and delivery, and birth complications. This system, originally developed for use in California hospitals, has been expanded for use in other states.

**Title:** AVSS Training, Consulting and Support

**Grant No.:** CA HLTH 869393

**PI:** Ron Williams, Research Economist

**Abstract:** Support services are being provided to train California district health department personnel in operating the Automated Vital Statistics System (AVSS).

**Title:** Community Choice and the Demand for Public Goods

**Grant No.:** NSF SES84-09045

**PI(s):** Perry Shapiro, Research Economist

Ted Bergstrom, Research Economist

Daniel Rubinfeld, Research Economist

**Abstract:** Empirical analysis of data collected in surveys of voters in Michigan and Massachusetts is being used in estimating the demand for public goods, with particular emphasis on public education.

**Title:** Computerized Assessment of Spatial Abilities

**Grant No.:** U Wash 235734

**PI:** James Pellegrino, Research Psychologist

**Abstract:** Research on the development of a computerized battery of spatial ability tests is being conducted.

Research in Progress 1986/87 (continued)

- Title:** Computer Based Assessment of Complex Cognitive Abilities  
**Grant No.:** U Wash 11533  
**PI:** James Pellegrino, Research Psychologist and Educator  
**Abstract:** Funding has been provided to develop computer-based tests of complex cognitive performances, including studies of performances in spatial orientation, orientation and spatial-visual reasoning, motor and spatial-visual reasoning orientation and motor response, orientation and verbal command complexity, and general vs. specific management abilities.
- Title:** Constructing Geographic Expert System With Learning Capabilities Into a Knowledge Based Geographical Information System  
**Grant No.:** NASA NGT 05-010-805  
**PI(s):** Terry Smith, Research Geographer  
**Abstract:** Research has focused on the problems of spatial knowledge representation, spatial reasoning procedures of GES, and the problems of knowledge transfer and acquisition.
- Title:** Del Amo Landfill Maternal and Child Health Data Base Study  
**Grant No.:** DEL AMO CA HLTH 86-88507  
**PI:** Ron Williams, Research Economist  
**Abstract:** Support has been provided to analyze perinatal and birth data derived from census tract-specific/area-specific values for selected regions in Los Angeles. The data will be compared with birth data from the Del Amo landfill area census tract.
- Title:** Domesday Book Database  
**Grant No.:** NEH RT 20213  
**PI's:** C. Warren Hollister, Research Historian  
Robin Fleming, Associate Specialist  
**Abstract:** Work on a comprehensive computerized database of the Domesday Book, the record of William the Conqueror's great land survey of A.D. 1086, is being continued.
- Title:** Immigration, Self-Selection, and the Choice of Destination: The Cases of Australia, Canada and the U.S.  
**Grant No.:** Upjohn 86-04-60  
**PI:** George Borjas, Research Economist  
**Abstract:** The principal investigator is studying the process by which potential emigrants choose the country-of-destination and the productivity differences caused by the self-selection rule in the world.
- Title:** International Conference on Phloem Transport  
**Grant No.:** Phloem Transport DND  
**PI(s):** James Cronshaw, Research Biologist  
W. J. Lucas, Research Biologist  
**Abstract:** A conference on phloem transport was held in Asilomar, California, August 18-23, 1985. Scientists from around the world submitted papers which have been prepared for publication.

**Research in Progress 1986/87 (continued)**

- Title:** Labor Markets and the Business Cycle  
**Grant No.:** DMB 8612765  
**PI:** Gary Hansen, Research Economist  
**Abstract:** 15 CPU hours on a Cray II computer has been used to study dynamic general equilibrium models to account for business cycles in a way consistent with observed features of labor markets.
- Title:** Maternal and Child Health Data Base: Application and Dissemination  
**Grant No.:** CA HLTH 86-89089  
**PI:** Ron Williams, Research Economist  
**Abstract:** Application and dissemination of the Maternal and Child Health Data Base will be continued.
- Title:** Monte Carlo Research into Predictive Likelihood Techniques  
**Grant No.:** DMB 86-12826  
**PI(s):** William Parke  
Tom Cooley  
**Abstract:** Computer time has been provided for a numerical study of several predictive likelihood applications using Monte Carlo integration techniques.
- Title:** Men and Women's Commitment to Work and Family  
**Grant No.:** NSF SES85-10172  
**PI(s):** Denise Bielby, Associate Research Sociologist  
William Bielby, Research Sociologist  
**Abstract:** This research study has focused on the ways men's and women's roles become sources of identity, how individuals develop preferences for a particular balance of work and family activities, and how these commitments are affected by work experiences.
- Title:** Object Exploration and Recognition by Human and Machine  
**Grant No.:** N00014-86-K-0232  
**PI:** Roberta Klatzky, Research Psychologist  
**Abstract:** Support has been provided to develop a general model of object apprehension and recognition through haptic exploration. The research will combine human behavioral studies and robotic technology.
- Title:** Proposal to NSF-NIH for Supercomputer Time  
**Grant No.:** DMB 8612824  
**PI:** Valery Bencivenga, Research Economist  
**Abstract:** 25 CPU hours of supercomputer time has been used to study business cycles using a stochastic optimum growth model.
- Title:** Research and Analysis to Satisfy AB 1614 (Mono Lake Research)  
**Grant No.:** Cal Department Fish & Game  
**PI(s):** Daniel Botkin, Research Biological Scientist  
Harold L. Votey, Jr., Research Economist  
**Abstract:** California State Assembly Bill 1614, the Mono Lake Research Bill, requires a comprehensive analysis of the aquatic ecology, avifauna, air quality and hydrology of the Mono Basin. The primary purpose of this analysis is to facilitate management of the Mono Basin.

Research in Progress 1986/87 (continued)

- Title:** Research Conference on Preference Reversals  
**Grant No.:** Sloan Foundation 85-11-3  
**PI(s):** David Messick, Research Psychologist  
Perry Shapiro, Research Economist  
**Abstract:** Invited participants presented original papers on the topic of preference reversals at a three-day conference held in Santa Barbara, February 10-12, 1986.
- Title:** Riverside County Census Tract Specific Maternal and Child Health Data Base  
**Grant No.:** Riverside 05526  
**PI:** Ron Williams, Research Economist  
**Abstract:** The funded research will produce a Maternal and Child Health Data Base by census tract within Riverside County for the 1982-84 birth cohorts and develop software for analyzing the data.
- Title:** The Law, Economics, Opportunities and the Social Environment: Effects on Criminal Career Choices In The Transition from Youth to Adult  
**Grant No.:** NSF SES86-06322  
**PI(s):** Llad Phillips, Research Economist  
Harold L. Votey, Jr., Research Economist  
**Abstract:** Support has been provided to extend and refine previous research on the effect contact with the criminal justice system has on the criminality of youth and young adults.
- Title:** 1978-1984 BKK Landfill Maternal and Child Health Data Base Study  
**Grant No.:** BKK CA HLTH 86-88507  
**PI:** Ron Williams, Research Economist  
**Abstract:** Continuation of a project that is developing census-tract/area-specific values for selected regions in Los Angeles County.

## OTHER ACADEMIC ACTIVITIES

### Seminars

A series of seminars were presented by the Center for the Study of Spatial Cognition and Performance (CSSCAP), and jointly sponsored by the Departments of Computer Science, Psychology, and Geography. Directed by Roberta Klatzky, James Pellegrino and Terence Smith, CSSCAP presented the following speakers during 1986/87:

- October 3** "Semantics Within Cognitive Science"  
George Lakoff, University of California, Berkeley
- October 10** "Humans as Logicians: The Search for a Mental Calculus"  
Russell Revlin, University of California, Santa Barbara
- October 17** "Reasoning From Incomplete Knowledge"  
Richard Duran, University of California, Santa Barbara
- October 24** "Constructive Mathematics"  
John E. Doner, University of California, Santa Barbara
- October 31** "The Early Development of Arithmetic Reasoning"  
Alice Klein, University of California, Santa Barbara
- November 7** "The Development of Computational Expertise"  
Susan R. Goldman, University of California, Santa Barbara
- November 14** "Teachable Aspects of Mathematical Problem Solving"  
Richard E. Mayer, University of California, Santa Barbara
- November 17** "Associative Networks"  
Gunther Palm, Max-Planck Institute for Biological Cybernetics
- November 21** "Mathematical Cognition: A Universal?"  
Prentice Starkey, University of California, Santa Barbara
- December 5** "Cognition in Practice: Quantitative Problem Solving in the Lived-In World"  
Jean Lave, University of California, Irvine
- January 14** "Seeing and Imagining in the Cerebral Hemispheres: A Computational Theory Memory"  
Stephen M. Kosslyn, Harvard University
- January 16** "Language Attitudes and Beliefs About Talk"  
Jim Bradac and John Wiemann, University of California, Santa Barbara
- January 23** "Mutual Intelligibility in Human-Machine Interaction"  
Lucy A. Suchman, Xerox Corporation
- January 28** "Using Fast Weights to Deblur Old Memories and Assimilate New Ones"  
Geoffrey E. Hinton, Carnegie-Mellon University
- January 30** "Conversation Analysis: Talk as Social Interaction"  
Don H. Zimmerman, University of California, Santa Barbara

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- February 6** "Translation Functions: Abduction as a General Problem-Solver"  
Thomas J. Scheff, University of California, Santa Barbara
- February 20** "Comprehension Monitoring in Reading"  
Richard Duran, University of California, Santa Barbara
- February 13** "Reference: A Psychological Perspective"  
Russell Revlin, University of California, Santa Barbara
- February 27** "Cognitive Constraints on Information Flow in Language and Thought"  
Wallace Chafe, University of California, Santa Barbara
- March 6** "The Cognitive Implications of 'that-deletion' in English"  
Sandra A. Thompson, University of California, Santa Barbara
- March 9** "Sensitivity to Spatial Structure When Walking Without Vision: Insight From Research With Visually Impaired Persons"  
John Rieser, Vanderbilt University
- March 10** "Age- and Intelligence-Related Variations in Sensitivity to Spatial Structure"  
John Rieser, Vanderbilt University
- March 13** "Context Effects for Learning Words"  
Priscilla Drum, University of California, Santa Barbara
- April 9** "Self-Organization of Cognitive Recognition Codes: Active Regulation by Attention and Expectation"  
Stephen Grossberg, Boston University
- April 10** "Cortical Dynamics of Three-Dimensional Form, Color, and Brightness Perception"  
Stephen Grossberg, Boston University
- April 17** "The Intelligent Hand: Haptic Processing of Spatial and Nonspatial Information"  
Roberta Klatzky, University of California, Santa Barbara
- April 24** "Neural Net Models of Spatial Phenomena"  
Terry Smith, University of California, Santa Barbara
- May 1** "Spatial Cognition and Wayfinding in Complex Urban Environments"  
Reginald Golledge, University of California, Santa Barbara
- May 8** "The Psychophysics of Human Vision"  
Glen Wade, University of California, Santa Barbara
- May 15** "Human Visual Distance Perception"  
John M. Foley, University of California, Santa Barbara
- May 22** "The Computational Study of Visual Motion Analysis"  
Ellen C. Hildreth, MIT
- May 29** "Perceiving 3-D Structure From Optical Motion"  
Jack Loomis, University of California, Santa Barbara
- June 4** "Spatial Perception and Spatial Cognition"  
D. H. Warren, University of California, Riverside



- June 5** "Components of Human Spatial Ability"  
James W. Pellegrino, University of California, Santa Barbara
- June 12** "The Development of Spatial Orientation in Infants and Young Children"  
Linda P. Acredolo, University of California, Davis

### Conferences

Models of Money and Monetary Institutions Conference, sponsored by CORI, was held at UCSB on Saturday, May 9, 1987. The conference was organized by Jon Sonstelie and Gary Hansen of the Department of Economics. The following speakers participated:

Dan Peled  
Carnegie-Mellon University  
**"The Essential Intragenerational Role of Money: A Single Good Example"**

Thomas J. Sargent,  
Hoover Institution  
Bruce D. Smith,  
University of Western Ontario  
**"Modigliani-Miller Theorems in a Cash-in-Advance Model"**

Robert G. King,  
University of Rochester  
**"Private Information and Competitive Mechanisms"**

Mark Feldman  
Christian Gilles,  
University of California, Santa Barbara  
**"Pricing Strategies When Buyers Have Inferior Information"**

Finn E. Kydland,  
Carnegie-Mellon University  
**"The Role of Money in a Competitive Theory of Business"**

1986/87 PAPERS, REPORTS, PUBLICATIONS

Published, In Press

- BIELBY, D.** "Pay Equity and Employment Opportunities Among Writers for Television and Feature Film." Technical Report for the Writers Guild of America, west, Los Angeles, CA, 1987 (with W. T. Bielby).
- "From Data to Data." Review of *From Sun to Sun* by William Michelson in *Contemporary Psychology*, 31:7, 1986.
- "Social Construction of the Past: Autobiographies and the Theory of G. H. Mead." In D. Unruh and G. Livings (eds.), *Current Perspectives on Aging and the Life Cycle*. Jai Press, forthcoming 1987 (with H. S. Kully).
- "Goal Incongruence, Interdependence, and Decision-Making in a 'High-Tech' Firm." In R. L. Simpson and I. H. Simpson (eds.), *Research in the Sociology of Work*. Jai Press, in press (with Bielby, W. and Brastow, W.).
- "Sex Characteristics and Roles." To be reprinted in *Encyclopedia of Human Development and Education*, Pergamon, 1988. (Originally published in *International Encyclopedia of Education*, 1984).
- "Women's and Men's Commitment to Paid Work and Family." In B. Gutek, A. Stromberg, and L. Larwood (eds.), *Women and Work*, Vol. 3. Accepted for publication (with W. T. Bielby).
- "Sex Differences in Allocation of Work, Effort Among Professionals and Manager." In R. Schwartz (ed.), *Women at Work*. Accepted for publication (with W. T. Bielby).
- "She Works Hard for the Money: Sex Differences in Allocation of Effort to Work and Family." *American Journal of Sociology*, forthcoming (with W. T. Bielby).
- BIELBY, W.** "Arbitrary Metrics in Multiple Indicator Models of Latent Variables." *Sociological Methods and Research*, Vol. 15, No. 1, November, 1986.
- "Undoing Discrimination: Comparable Worth and Job Integration." In C. Bose and G. Spitze (eds.), *Ingredients for Women's Employment Policy*. Albany: State University of New York Press, forthcoming (with Baron, J.).
- "Sex Differences in Careers: Is Science a Special Case?" In J.T. Bruer, J. Cole, and H. Zuckerman (eds.), *Women and the Pursuit of Science*. New York: Norton, in press.
- "Modern Prejudice and Institutional Barriers to Equal Employment Opportunity for Minorities." *Journal of Social Issues*, in press.
- "Goal Incongruence, Interdependence and Decision-Making in a 'High-Tech Firm'." *Research in the Sociology of Work*. Jai Press, in press (with D. Bielby and W. Brastow).
- "Pay Equity and Employment Opportunities Among Writers for Television and Feature Film." Technical Report for the Writers Guild of America, west, Los Angeles, CA, 1987 (with D. Bielby).

"Arbitrary Normalizations." (Comments on Sobel, Arminger and Henry), *Sociological Methods and Research*, Vol. 15, No. 1, November, 1986.

"The Proliferation of Job Titles in Organizations." *Administrative Science Quarterly*, Vol. 31, No. 4, December, 1986 (with Baron, J. N.).

"Women's and Men's Commitment to Paid Work and Family." In B. Gutek, A. Stromberg, and L. Larwood (eds.), *Women and Work*, Vol. 3. Accepted for publication (with D. Bielby).

"Sex Differences in Allocation of Work, Effort Among Professionals and Manager." In R. Schwartz (ed.), *Women at Work*. Accepted for publication (with D. Bielby).

"She Works Hard for the Money: Sex Differences in Allocation of Effort to Work and Family." *American Journal of Sociology*, forthcoming (with D. Bielby).

BORJAS, G.

"The Demographic Determinants of the Demand for Black Labor." In H. Holzer, R. Freeman (eds.), *The Black Youth Employment Crisis*. University of Chicago Press, 1986.

"The Economic Consequences of Immigration." Reprint. In *Science*, Vol. 235, American Association of the Advancement of Science, February, 1987 (with Marta Tienda).

"The Self-Employment Experience of Immigrants." *Journal of Human Resources*, in press.

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- BENCIVENGA, V.** "The Empirical Implications of a General Equilibrium Model for Consumption and Real Business Cycles." In progress. (with Ron Michener).
- BIELBY, D.** "Sources of Diversity in Economic Well-Being of the Elderly. Submitted (with J. I. Baldwin).
- BORJAS, G.** "The Myth of Immigrant Assimilation in the Labor Market." Submitted to *Journal of Political Economy*.
- "Earnings Determination: A Survey of the Neoclassical Approach." In progress.
- Immigrants in the U. S. Labor Market: A Comparison of the 1970 and 1980 Census Cross-Sections." Submitted to *Demography*.
- "Self-Selection and the Earnings of Immigrants." Submitted to *American Economic Review*.
- BOTKIN, D.** "Ten Year Change in Forest Succession Measured by Remote Sensing." In progress (with F. Hall, D. Stebel and S. Goetz).
- "Trends in the Use of Remote Sensing in Ecological Research," (requested by the editors of *Trends in Ecology and Evolution*, Elsevier Publishing Co., Cambridge). In progress.
- "The Biosphere: A system of Integrated Parts." Chapter 3 in L. Margulis, M. B. Rambler (eds.), *Global Ecology*. Jones and Bartlett Publishing Co.: San Francisco. In progress (with J. F. Stolz, and M. N. Dastoor).
- "Science and the Global Environment." Chapter 1 in D. B. Botkin, M. Caswell, J. E. Estes, A. Orio (eds.), *Man's Role in Changing the Global Environment*. In progress.
- "New Dimension Analysis with Error Analysis for Quacking Aspen and Black Spruce." In progress (with K. D. Woods and A. H. Fieveson).
- "Biomass Estimation for Large Areas." In progress (with K. D. Woods, J. Star and J. E. Estes).
- "Emergent Properties of Closed Ecological Systems Models." In progress (with M. V. Wilson).
- Managing with Nature: The Application of Ecological Principles to the Process of

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- The Space Age and the Environment. In progress.
- BRONARS, S.** "The Effect of Rent-Maximization Unions on Why Workers Join Unions." Submitted to *Economic Inquiry* (with J.R. Lott).
- "The Real and Financial Decisions of Unionized Firms in a Dynamic Setting." Submitted to *American Economic Review* (with D.R. Deere).
- "Risk-Taking Behavior in Tournaments." Submitted to *Journal of Labor Economics*.
- "Tournaments, Elections, and Product Differentiation." Submitted to *Journal of Public Economics*.
- "Gambling and Market Efficiency in the Numbers Game." In progress.
- "Unions and The Market Value of Firms" (with D.R. Deere). In progress.
- "Non-parametric Tests of Labor Supply Behavior." In progress.
- CRONSHAW, J.** "The Cytochemical Localization of Adenosine Triphosphatase and Nitrophenyl Phosphatase in the Phloem of *Nicotiana tabacum* Using a Strontium Chloride Percipitation Technique." In progress.
- "The Distribution of Phloem Adenosine Triphosphatase Throughout the *Nicotiana tabacum* Plant." In progress.
- "Cytochemical Localization of Phloem Nucleoside Phosphatases and Acid Phosphatase in the Roots of Tobacco and Pea." In progress.
- "Evidence for Zonation of the Steroidogenic Cells in the Avian Adrenal Gland: The Corticotropic Responsiveness *in vitro* of Tissue Samples for the Subcapsular and Inner Zones of the Duck Adrenal Gland." In progress (with J. A. Ely and W. N. Holmes).
- GOLLEDGE, R.** "Preliminary Exploration of the An Anchor Point Hypothesis of Spatial Cognition." Submitted to *Journal of Environmental Psychology* (with H. Couclelis and W. Tobler).
- HANSEN, G.** "Straight Time and Overtime in Equilibrium". Submitted to *The Journal of Monetary Economics* (with T. J. Sargent).
- "Growth and Fluctuations." In progress.
- "Fluctuations in Total Hours Worked: A Study Using Efficiency Units." In progress.
- LOOMIS, J.** "Character Recognition and Legibility: I. Studies of Vision and Touch." In progress.
- "Character Recognition and Legibility: II. Response Bias." In progress.
- Character Recognition and Legibility: III. A Model." In progress.
- MEAD, W.** Book in preparation based on work under contract with the US Forest Service (with Dennis Muraoka, Mark Schniepp and Richard Watson).
- PARKE, W.** "Asymptotic Predictive Likelihood and Optimal Forecasting." Submitted to *Annals of*

*Statistics* (with Tom Cooley).

"Asymptotic Likelihood Based Prediction Functions." Submitted to *Econometrica* (with Tom Colley).

"The Operations of the Bank of England: 1890-1908." In progress (with Nurhan Davutyanyan and John Pippenger).

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"Nonlinear Least Squares and Multiple Local Minima." In revision.

"Multiple Local Minima and Approximate Sampling Distribution." In revision.

"Forecasting Expenditure Categories That Are Subject to a Budget Constraint." In progress.

"Partitioned Minimum Distance Estimation of Simultaneous Equation Models." In progress.

**PHILLIPS, L.** "The Influence of Police Interventions and Alternative Income Sources on the Dynamic Process of Choosing Crime as a Career." Submitted to *Journal of Quantitative Criminology* (with H. L. Votey).

**RUBINFELD, D.** "A Note on Optimal Public Enforcement with Settlements and Litigation Costs." Draft, December, 1986 (with A. M. Polinsky).

"The Deterrent Effect of Settlements and Trials." Draft, April, 1987 (with A. M. Polinsky).

**SHAPIRO, P.** "The Efficiency of Supply of Public Education" Submitted to *Journal of Public Economics* (with T. Bergstrom, J. Roberts and D. Rubinfeld).

"Taking, Insurance and Michaelman: Comments on Economic Interpretations of 'Just Compensation' Law" Submitted to *Journal of Legal Studies* (with W. Fischel).

"Cost and Demand for Education." In progress.

"Taking: An Economic - Constitutional Perspective." In progress.

**SMITH, T.** "Using Iterative Relaxation Procedures to Label Occluded Regions in Oblique Images." In progress (with R. Miko).

"A Production System for Labelling Occluded Regions in Oblique Images." In progress (with R. Shah).

"Genetic Algorithms Applied to the Calibration of Choice Set Constrained Interaction Models of Migration." In progress (with K. de Jong).

**VOTEY, H.** "The Influence of Police Interventions and Alternative Income Sources on the Dynamic Process of Choosing Crime as a Career." Submitted to *Journal of Quantitative Criminology* (with Llad Phillips).

"Crime, Youth and the Labor Market: A Micro Study Based on Individual Data."

Submitted to *Review of Black Political Economy*, for special issue on youth and crime (with Llad Phillips).

"The Self Sorting Process of Choosing a Criminal Versus a Legal Career: An Economic Analysis. Submitted to *Journal of Black Political Economy* (with Llad Phillips).

"Economic Opportunity, Parental Influence and Crimes by Youth." Submitted to *Review of Black Political Economy*, for special issues on youth and crime (with Llad Phillips).

"The Relationship Between Employment and Crime: A Reexamination." In progress (with Llad Phillips).

"Identifying the Special Employment Services Needed to Successfully Place Ex-Offenders in Jobs." In progress (with Llad Phillips).

"The Forecast Capabilities of the Econometric Model of Swedish Crime Generation and Control." In progress.

"Crime Causality and Control for Black and White Female Youth." In progress (with Llad Phillips).

"Deterrence and Incapacitation Effect of Efforts to Control Drunken Driving" In progress (with Perry Shapiro).

"A Theory of Status Offences and Juvenile Delinquency with Supporting Evidence. In progress (with Llad Phillips).

**WILLIAMS, R.** "Racial Differences in Neonatal Mortality: What Causes Contribute to the Gap?" For submission to *Pediatrics* (with J. J. Binken and K. R. Rust).

### **1986/87 SEMINARS, PRESENTATIONS, COLLOQUIA**

**BIELBY, D.** "Household Responsibilities and the Allocation of Work Effort Among Professionals and Managers." Presented at the UCLA Conference on Women and Work, May, 1987 (with W. T. Bielby).

"Economic Status of the Aged." Presented at the Thematic Roundtable, Gerontological Society, Chicago, November 1986.

"Sex Differences in the Allocation of Effort: Energy, Roles, and Perceptions." Presented at University of California San Diego Medical School, March, 1987.

"She Works Hard for the Money: Household Responsibilities and the Allocation of Effort." Presented at Department of Sociology Colloquium Series, Emory University, Atlanta, Georgia, April, 1987.

"She Works Hard for the Money: Household Responsibilities and the Allocation of Work Effort." Presented at the Stanford University Conference on Organizations, Asilomar, Monterey, California, May, 1987.

**BIELBY, W.** "Down and Out in Beverly Hills: Who Gets Ahead Writing for Television and Film:

Invited lecture at the Department of Sociology, University of California, San Diego, November, 1986.

"Undoing Discrimination: Job Integration and Comparable Worth." Invited lecture at the Department of Sociology, Emory University, April 23, 1987.

"Down and Out in Beverly Hills: Screenwriting and the Externalization of Employment." Invited lecture at the Graduate School of Business, Stanford University, Stanford, CA, May 6, 1987.

"Household Responsibilities and the Allocation of Effort Among Professionals." Presented at the UCLA Conference on Women and Work, May, 1987 (with D. Bielby).

**BOTKIN, D.** Chairman for the "Study of Mono Lake" workshop, Santa Barbara, November, 1986.

Invited speaker at "The Future of Watershed Research in the Asia Pacific Region" workshop, Taiwan Forestry Research Institute, Taipei, Taiwan, March, 1987.

**GOLLEDGE, R.** Elements of Images: Problems in the Reconstruction of Images from Components." Presented at the Regional Science Association Meetings, Columbus, Ohio, November, 1986.

"Development of Individualized Computer Operating Systems (ICOS): Resolving Problems of the Visually Handicapped or Blind Geographer." Presented at the Association of American Geographers Meetings, Proland, Oregon, April, 1987.

Behavioral Approaches to Urban Problems." Presented at the Opening of the New Urban Studies Institute at the Universidad Complutense, Madrid, Spain, May, 1987.

**HANSEN, G.** "Growth and Fluctuations." Presented at the University of Missouri, Columbia, MO, December 1986 and the Econometrics Society Winter Meetings, December 1986.

"Straight Time and Overtime in Equilibrium." Presented at the Department of Economics, Duke University, January 1987 and the Department of Economics, UCLA, February 1987.

**KLATZKY, R.** "Are Object Properties Equally Salient for Vision and Haptics?" Presented at the annual meeting of the Psychonomics Society, New Orleans, November 1986 (with S. Lederman and C. Reed).

"Exploratory Hand Movement and Object Perception." Presented at the annual meeting of the Psychonomics Society, New Orleans, November 1986 (presented and co-authored by S. Lederman).

"Object Exploration in One and Two Fingered Robots." Presented at IEEE International Conference on Robotics and Automation, Raleigh, North Carolina, April, 1987 (with S. Lederman and R. Bajcsy).

"Procedures for Apprehending vs. Functioning with Objects: More Different than Similar." Presented at "Vision and Action: The Control of Grasping" Conference, sponsored by Canadian Institute for Advanced Research, Program in AI and Robotics, May, 1987.

**LOOMIS, J.** "Visual Perception of Absolute and Relative Distance Using Optical Motion."

Community and Organization Research Institute

Presented at the Psychological Society of Ribeirao Preto, Sao Paulo, Brazil, October, 1986.

"Perceiving 3-D Structure From Motion: Importance of Axis of Rotation." Presented at the Association for Research in Vision and Ophthalmology, Sarasota, Florida, May, 1987.

**MEAD, W.** "Crude Oil Prices and the OPEC Impact." Presented at a conference sponsored by Peat, Marwick and Mitchell, Seattle Washington, August 6, 1986.

"Alternative Electric Power Options for California." Presented at the California Energy Policy Seminar, UC Berkeley, September 19, 1986.

Four lectures, presented at the Energy Conference, Lewis and Clark College, Portland, Oregon, January 26-27, 1987.

Lecture to management, US Forest Service, Portland, Oregon, January 27, 1987.

**MESSICK, D.** Lecture presented at the International Congress of Applied Psychology, Jerusalem, Israel, 1986.

Lecture presented at the International Conference on Social Justice in Human Relations, Leiden, the Netherlands, 1986.

**PHILLIPS, L.** "Crime, Youth and the Labor Market: A Micro Study Based on Individual Data." Presented at the Western Economic Association Meetings, San Francisco, July 1986.

"Drug Abuse and the Serious Traffic Offender." Presented at the 10th International Conference on Alcohol, Drugs and Traffic Safety, Amsterdam, Netherlands, September 1986 (with H. L. Votey).

"Economic Opportunity, Parental Influence and Crimes By Youth." Presented at the American Economic Association Meetings, New Orleans, December 1986 (with H. L. Votey).

**SHAPIRO, P.** "Taking: An Economics-Constitutional Perspective," Presented at the Association of Real Estate and Urban Economics Meeting, 1986.

**SMITH, T.** Invited lecturer at the Micro Europe '87 Conference, organized by Department of Defense, Navy Regional Automation Center.

**VOTEY, H.** "The Self Sorting Progress of Choosing a Criminal Versus a Legal Career: An Economic Analysis." Presented at the Western Economic Association International Annual Meetings, San Francisco, July, 1986.

"Deterrence, Income Opportunities and Moral Compliance with the Law: An Investigation into Crime by Youth." Presented at the Crime Control Theory Conference, University of Colorado, Boulder, Colorado, July 17-18, 1986.

"Economic Opportunity, Parental Influences and Crimes by Youth." Presented at the American Economic Association Annual Meetings, December 29, 1986 (with Llad Phillips).

**WILLIAMS, R.** "Progress on the Automated vital Statistics System. Presented at the 114th Annual Meeting of the American Public Health Association, Las Vega, Nevada, October 1,

1986 (with Chen, P., Marinko, J.A.).

"Twinning Rates Derived from California's Vital Records." Presented at the 114th Annual Meeting of the American Public Health Association, Las Vegas, Nevada, October 1, 1986 (with Rust, K.J. and Giannoni, P.P.).

"The Use of California's Maternal and Child Health Data Base in Perinatal Regionalization Programs." Presented at the Upper Trinity Perinatal Association, Dallas, Texas, January 29, 1987.

## **PUBLIC AND PROFESSIONAL SERVICE ACTIVITIES**

**BIELBY, D.** Organizer and Presider, Pacific Sociological Association, Session on Aging, Eugene, Oregon, April 1987.

Referee for the following:

*American Sociological Review*

National Science Foundation

*Social Psychology Quarterly*

*Social Forces*

*Sociology and Social Research*

*Sociology of Work and Occupations*

*Sociological Forum*

*Signs*

*Social Science Quarterly*

*Sociological Quarterly*

**BIELBY, W.** Secretary/Treasurer of the Methods Section of the American Sociological Association.

Councilmember of the Organizations and Occupations Section of the American Sociological Association.

Member of the Social Science Research Council Committee on Occupational Measurement.

Member of the National Science Foundation Sociology Review Panel.

**BOTKIN, D.** Co-organizer for "The Application of Ecological Principles to Land Management" workshop, University of the Philippines, Los Banos, Philippines, March, 1987.

Co-organizer for the International Workshop, "Development of a Research Program on the Biosphere," Venice Italy, November, 1986.

Consulting scientist to Regione Veneto, Italy, "Agricultural Crop Type, Yield Estimation and Econometric Modeling in an Information Systems Context, to J. E. Estes, M. F. Caswell, J. L. Star.

**BRONARS, S.** Served as referee for:

National Science Foundation

*Journal of Labor Economics*

*Review of Economic Studies*



**CRONSHAW, J.** Reviewer for research grants for NSF Developmental Biology Program and Instrumentation Program.

Member NSF Study Panel for Scientific Instrumentation Program.

Reviewing editor for:

*Journal of Cell Biology*  
*American Journal of Botany*  
*Biologie Cellulaire*  
*Protoplasma*  
*Canadian Journal of Botany*

**GOLLEDGE, R.** Advisor Editor for *The Professional Geographer*.

Co-editor for *Urban Geography*.

Reviewer for the following journals:

*Annals of the Association of American Geographers*  
*Environment and Planning A*  
*Environment and Behavior*  
*The Professional Geographer*  
*Urban Geography*  
*Geographical Analysis*  
*Environmental Psychology*

**HOLLISTER, C.** Consultant for:

NEH  
Harvard University Press  
Johns Hopkins University Press  
Indiana University Press  
University of Chicago Press  
Midieval Academy of America  
Michigan State University  
Yale University  
Brandeis University  
University of Pennsylvania

**KLATZKY, R.** Member of NIMH panel on Basic Behavioral Sciences for the Schizophrenic Research Task Force.

Chair, APA Task Force on Scientific and Technological Careers in Psychology.

Editorial board member for *Journal of Experimental Psychology: Learning, Memory and Cognition*

Associate Editor for *Memory and Cognition*.

**MESSICK, D.** Editorial board member for the following journals:

*Journal of Experimental Social Psychology*  
*Journal of Personality and Social Psychology*

Manuscript consultant for the following journals:

*Journal of Experimental Psychology*  
*Journal of Personality and Social Psychology*  
*Psychological Review*  
*Organizational Behavioral and Human Performance*  
*Behavioral Science*  
*Social Psychology Quarterly*  
*Social Cognition*

**RUBINFELD, D.** Member of the editorial board for the *Evaluation Review*.

Member of the Faculty Advisory Board, Center for Real Estate and Urban Economics, UC Berkeley.

Member of the Working Panel on Field Experimentation in Criminal Justice, National Academy of Sciences.

**SHAPIRO, P.** Served as referee for the following:

*American Economic Review*  
*Economic Inquiry*  
*Journal of Political Economy*  
*National Tax Journal*  
*of Economic Theory*  
*International Economic Review*  
*Land Economics*  
*Urban Geography*  
National Science Foundation Cambridge University Press

**VOTEY, H.** Peer review of proposal for Geography on Economic-geography regional analysis.

Served as referee for:

*Accident Analysis and Prevention*  
*Contemporary Policy Issues*  
*Journal of Criminal Justice*  
*Journal of Quantitative Criminology*

**WILLIAMS, R.** Reviewer for the following scientific journals:

*American Journal of Obstetrics and Gynecology*  
*American Journal of Public Health*  
*Journal of the American Medical Association*  
*New England Journal of Medicine*  
*Obstetrics and Gynecology*

Consultant for:

Massachusetts Department of Public Health  
Rhode Island Department of Health  
Upper Trinity Perinatal Association

Member of the editorial board for *Journal of Perinatology*

## EXPENDITURES - EXTRAMURAL 1986-87

GRANT NO./PI UCSB ACCOUNT NO.	SALARIES BENEFITS	S&E	EQUIP- MENT	TRAVEL DOMESTIC	TRAVEL FOREIGN	SUB- CONTRACTS
NSF SES85-10172-Bielby 8-447628-22214	\$14187.35 1776.04	\$5958.52		\$1110.84		
86-04-60 Upjohn-Borjas 8-447628-59828	\$17213.89 1850.66	\$4680.50		\$25.00		
Cal Fish & Game-Botkin 8-447628-20758	\$1311.33 1124.36	\$26117.43		\$5525.21		\$150000.00
PHLOEM CNF-Cronshaw 8-447628-49905	\$3999.60	\$5250.24	\$1187.20		\$5114.51	
NEH RT20213-82-Hollister 8-447628-23194	\$3110.04 1003.34	\$4191.76		\$3787.90	\$3058.00	
N00014-86-K-0232-Klatzky 8-487628-25905	\$13615.27 742.42	\$1313.31	\$8689.80	\$1060.68		\$84183.06
U WASH 11533-Pellegrino 8-447628-59759	\$42777.62 3085.47	\$7390.68	\$8342.92	\$1013.89		
U WASH 235734-Pellegrino 8-447628-59760		\$206.06				
NSF SES86-06322-Phil/Vot 8447628-22268	\$13011.70 1506.69	\$1439.38		\$1494.02		
NASA NGT055-010-805-Smith 8-447628-23286 8-784672-23286		\$4285.94		\$172.00		\$24000.00
NSF SES84-09045-Shapiro 8-447628-22164	\$1684.93 146.33	\$1871.87	\$889.05	\$797.37		
CA Hlth 86-89089-Williams 8-447628-20788	\$122259.79 29239.71	\$31464.19		\$3957.67		
CA Hlth 86-89393-Williams 8-447628-20789	\$73938.67 15166.79	\$12948.28		\$22845.30		
Riverside 05526-Williams 8-447628-20906	\$3657.82 130.56	\$3153.04				
CA Hth 86-88507-Williams 8-447628-20793	\$4115.25 111.96	\$315.98				
CA Hth 86-88507-Williams 8-447628-20801	\$576.00 5.99	\$97.82				
<b>TOTALS:</b>	<b>\$457349.58</b>	<b>\$110685.00</b>	<b>\$19108.97</b>	<b>\$41789.88</b>	<b>\$8172.51</b>	<b>\$258183.06</b>

## EXPENDITURES - INTRAMURAL 1986-87

<u>ACCOUNT NAME</u> <u>ACCOUNT NO.</u>	<u>SALARIES/</u> <u>BENEFITS</u>	<u>SUPPLIES &amp;</u> <u>EXPENSES</u>	<u>EQUIP-</u> <u>MENT</u>	<u>SPECIAL</u> <u>PROJECTS</u>
CORI 8-447628-19900	\$79399.28 32072.07	\$7190.51	\$3655.26	\$21257.05
CORI DOMESDAY 8-447628-19900-5				\$6650.07
CORI 8-447628-07427		\$4063.27		\$5981.34
CORI CSSCAP 8-447628-07425-5	\$24684.67 743.88	\$9264.09		\$7896.54 col series
CORI EDUCATIONAL FUND 8-447628-05397				\$4856.53
HAND CONFIG.-Klatzky 8-597680-19900-7	\$1507.92			
ANALYSIS-Golledge 8-597681-19900-7	\$1494.39		\$590.61	\$785.41
COMPUTATIONAL-Smith 8-597682-19900-7	\$3901.50			
FISHER MINIGRANT-Fisher 8-407317-19904	\$953.56 25.93	\$10.59		
DOMESDAY PROJ.-Hollister 8-447628-09534		\$3911.07		
UERG-Mead 8-597801-19900	\$24694.99 2029.79	\$553.80		\$2068.86
UERG-Mead 8-597801-07427	\$2167.50			
CAL SPACE-Smith 8-597802-19900	\$9884.00 105.26			
TOTAL	<u>\$183,664.74</u>	<u>\$24,933.33</u>	<u>\$4245.87</u>	<u>\$49,495.80</u>

APPENDIX - B · 1986-87 ANNUAL REPORT

ORU COMMUNITY AND ORGANIZATION RESEARCH  
INSTITUTE

STATISTICAL SUMMARY

1a) UCSB academic staff engaged in research:

a) Faculty	<u>16</u>	d) Postdoctoral	<u>3</u>
b) Professional Researchers	<u>1</u>	e) Graduate	<u>14</u>
c) Specialists	<u>6</u>	f) Undergraduates	<u>4</u>
g) Other (specify _____)			

TOTAL 44

1b) Participation from other campuses, colleges, universities, and industry:

a) Faculty	<u>19</u>
b1) Graduates	<u>1</u>
b2) Undergraduates	<u>          </u>
b3) Other (designate)	<u>2</u>

L. Suchman, Xerox Corporation  
G. Palm, Max-Planck Institute

TOTAL 22  
See Appendix B-I

2) Number of employees and FTE in unit:

a) Employees on University Funds:

	Number	FTE
Professional	<u>          </u>	<u>          </u>
Technical	<u>8</u>	<u>.75</u>
Administrative	<u>4</u>	<u>1.40</u>
Clerical	<u>5</u>	<u>2.90</u>
TOTAL	<u>17</u>	<u>5.05</u>

TOTAL NUMBER: 17

TOTAL FTE: 5.05

b) Employees on Non-University Funds:

	Number	FTE
Professional	<u>1</u>	<u>.82</u>
Technical	<u>3</u>	<u>2.24</u>
Administrative	<u>2</u>	<u>1.75</u>
Clerical	<u>1</u>	<u>.18</u>
<b>TOTAL</b>	<u>7</u>	<u>4.99</u>

TOTAL NUMBER: 7

TOTAL FTE: 4.99  
See Appendix B-2

- 3) Number of Publications: (See Pgs. 14-22 of Section A)..TOTAL: 103
- 4) Number of proposals submitted:.....TOTAL: 33
- 5) Number of seminars, symposia, etc. sponsored by the unit: (See Pgs. 11-13 of Section A).....TOTAL: 40
- 6) Amount of space currently occupied (Sq. Ft.).....TOTAL: 4741

See Appendix B-3

**APPENDIX A-1  
EXTRAMURAL RESEARCH ACTIVITY**

**Proposals Submitted 1986/87**

<b>PI(s)/ Grant #</b>	<b>Funding Agency</b>	<b>Period of Award</b>	<b>Amount Requested</b>	<b>Status/ Funded</b>
ANSELIN, LUC	US Department of Commerce	7/01/87 8/31/88	\$44,087	Denied

**Is Good Design Good Business? An Assessment of the Locational Determinants of the Success of Design Initiatives for Commercial Revitalization**

The proposal's objective is to measure the importance of design initiatives in determining success of commercial revitalization efforts. Economic and locational data from censuses of wholesale and retail trade patterns will provide the basis for a multivariate statistical analysis of the commercial design program characteristics that can explain revitalization success.

ANSELIN, LUC	UC Institute of Global Conflict & Cooperation	7/01/87 6/30/88	\$15,356	Denied
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**Space-Time Dynamics and Systemic Models of the Determinants of International Conflicts**

The proposed research aims to (1) improve the methodological basis for empirical studies of the causes of war through explicit incorporation of the dynamics over time and space and (2) develop a theoretical framework in which determinants of international conflicts are found in general attributes of the global system, as well as national characteristics.

ANSELIN, LUC W-700	Water Resources UC Davis	7/01/87 6/30/89	\$44,896	Funded
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**The Application of an Integrated Multiregional Input-Output and Econometric Modeling Framework to California Water Resources Problem**

The proposed research plans to update the Department of Water Resources input-output water usage model by expanding it into a modular framework of integrated models. A set of operational modeling tools will be developed to be used in a microcomputer environment.

BORJAS, GEORGE BRONARS, STEPHEN G.	Inter-Univ. Program for Latino Research	7/01/87 6/30/89	\$43,138	Denied
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**Hispanic Self Employment: A Theoretical and Empirical Analysis**

The proposed research will initiate a systematic empirical study and analysis of the determinants of Hispanic self employment propensities and incomes. The primary data set to be used in this research will be the *1980 A Sample of the U. S. Census*.

**APPENDIX A-1 (continued)  
Proposals Submitted 1986/87**

<b>PI(s)/ Grant #</b>	<b>Funding Agency</b>	<b>Period of Award</b>	<b>Amount Requested</b>	<b>Status/ Funded</b>
<b>BORJAS, GEORGE BRONARS, STEPHEN 87-4-12</b>	<b>Alfred P. Sloan Foundation</b>	<b>7/01/87 6/30/89</b>	<b>\$59,798</b>	<b>Funded \$60,000</b>

**Immigration and the Family**

The proposed research will investigate the role played by the family prior to and after immigration in the determination of the labor market success of foreign-born persons. The researchers will analyze the effect the family reunification provisions of the 1965 amendments to the Immigration and Nationality Act have had on the immigrant pool, and how the children of immigrants (second generation) perform in achieving earning parity with the native labor pool.

<b>BRONARS, STEPHEN G.</b>	<b>NSF</b>	<b>7/01/87 6/30/88</b>	<b>\$18,116</b>	<b>Denied</b>
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**Unionization and Firm Behavior: A Collaborative Research Proposal with Donald R. Deere.**

The proposed research will undertake a systematic analysis of the relationship between unionization and firm behavior and will estimate the impact of unionization on the real investment and financial decisions of firms. The research will be conducted in collaboration with Dr. Donald Deere of Texas A&M University.

<b>BRONARS, STEPHEN</b>	<b>Upjohn Institute</b>	<b>01/01/87 12/31/87</b>	<b>\$24,892</b>	<b>Pending</b>
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**The Market Value of Unemployment Benefits Assessing the Effectiveness of the Unemployment Insurance System**

The proposed research will estimate the market value of unemployment insurance (UI) benefits by comparing compensating wage premiums for unemployment risk to the amount of public and private unemployment benefits for which workers are eligible. A cost-benefit analysis of public and private UI plans will be implemented from the market value estimation.

<b>CASWELL, MARGRIET W-709</b>	<b>Water Resources Center UC Davis</b>	<b>07/01/87 06/30/89</b>	<b>\$37,497</b>	<b>Funded</b>
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**The Interaction Between Water Prices, Application Rates, Contaminated Drainwater, and Irrigation Technology Adoption**

The proposed research aims to predict the irrigation technology choice for individual farmers based on crop type, land quality, drainage characteristics, and water prices, and to estimate the change in water demand and drain output which might result from changes in water prices.



**APPENDIX A-1 (continued)**  
**Proposals Submitted 1986/87**

<b>PI(s)/ Grant #</b>	<b>Funding Agency</b>	<b>Period of Award</b>	<b>Amount Requested</b>	<b>Status/ Funded</b>
<b>KLATZKY, ROBERTA N00014-86-K-0232</b>	<b>Office of Naval Research</b>	<b>5/01/87 12/31/87</b>	<b>\$139,500</b>	<b>Funded \$139,500</b>

**Object Exploration by Humans and Machines**

Continuation of a project that is developing a general model of object apprehension and recognition through haptic exploration.

<b>KLATZKY, ROBERTA N00014-86-K-0232</b>	<b>Office of Naval Research</b>	<b>5/01/86 4/30/89</b>	<b>\$12,000</b>	<b>Funded</b>
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**Development of an Articulated (two-degree of freedom per finger) Three Finger Hand Under Computer Control**

This proposal requests supplementary funds to a previously awarded grant (ONR Grant R&T 4424200) for purchase of a more dexterous robotic end effector and related equipment.

<b>KLATZKY, ROBERTA PELLEGRINO, JAMES DOHERTY, SALLY</b>	<b>Air Force Office of Scientific Research</b>	<b>07/01/87 12/31/88</b>	<b>\$93,279</b>	<b>Funded \$92,656</b>
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**Hand Configuration and Object Processing: An Integrated System**

The research project aims to develop and provide empirical support for a theoretical model of hand configuration and its relation to object processing. Empirical studies will be conducted to determine in detail hand shaping response, the critical visual parameters related to four major classes of hand configuration, and the linkages between hand shaping and object properties.

<b>LEROY, STEPHEN GILLES, CHRISTIAN PARKE, WILLIAM</b>	<b>NSF</b>	<b>11/01/87 12/31/88</b>	<b>\$62,511</b>	<b>Pending</b>
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**Stock Price Volatility Tests Based on the Geometric Random Walk**

The researchers propose to conduct tests of stock price volatility that assume price levels are nonstationary and dividends are distributed according to a geometric random walk. This proposal also plans to develop LeRoy-Porter's procedure for dealing with nonstationarity and to consider possible sources of bias.

**APPENDIX A-1 (continued)  
Proposals Submitted 1986/87**

<b>PI(s) Grant #</b>	<b>Funding Agency</b>	<b>Period of Award</b>	<b>Amount Requested</b>	<b>Status/ Funded</b>
LOOMIS, JOHN GOLLEDGE, REGINALD DOHERTY, SALLY KLATZKY, ROBERTA PELLEGRINO, JAMES PHS 1 ROI EY07022-01	NIH	7/1/87 6/30/90	\$314,393	Funded \$104,251 (7/87-6/88)

**Analysis of Navigation Without Sight (Submitted to NIH)**

The research proposes to conduct a series of experiments to study how blind and blindfolded observers represent their surroundings and how they use this information to navigate. The experiments will analyze navigation performance into two major components: (1) perception of distance and heading changes and (2) cognitive representations of surrounding space and transformation of this representation during locomotion.

LOOMIS, JOHN GOLLEDGE, REGINALD DOHERTY, SALLY KLATZKY, ROBERTA PELLEGRINO, JAMES	NSF	01/01/87 12/31/89	\$310,511	Withdrawn
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**Analysis of Navigation Without Sight**

See above for description of proposed research.

MAYER, RICHARD	NSF	7/01/87 6/30/90	\$225,969	Denied
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**Learning to Think Procedurally with Programming Languages**

This research plans to analyze the conceptual knowledge required to learn and use a computer programming language. The project will focus on two kinds of knowledge required for procedural thinking in computer programming (micro-concepts and macro-concepts) and will evaluate changes that occur in these concepts while learning to program.

MEAD, WALTER	Water Resources UC Berkeley	7/1/87 6/30/88	\$20,862	Pending
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**California Oil and Gas Policy Issues: Chapter 1 & 2**

Request for support in completing report on California oil and gas leasing policies.

**APPENDIX A-1 (continued)  
Proposals Submitted 1986/87**

<b>PI(s)/ Grant #</b>	<b>Funding Agency</b>	<b>Period of Award</b>	<b>Amount Requested</b>	<b>Status/ Funded</b>
MEAD, WALTER BRADLEY, PAUL HALL, V. B. BILEK, EDWARD NEIMAN, MAX MCGUIRE, C. BART	Systemwide Pacific Rim Research Program	0-0-0 0-0-0	\$33,270	Pending

**Natural Resource Alienation Policy, Analysis of Policies Followed by Select Pacific Rim Countries, Implication for Others.\***

The proposed research will evaluate alternative natural resource alienation policies, concentrating on oil and gas leasing and timber sales policy alternatives. The study will focus on Pacific Rim countries that have established alienation systems, and assess their efficiency in allocating and developing resources.

MENDEL, MAURICE GOLLER, MONICA	Deafness Research Foundation	01/01/87 12/31/87	\$12,500	Pending
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**Low Frequency Threshold Estimation with the Middle Latency and 40Hz Responses During Sleep**

The proposed research will investigate the sensitivity of low frequency information in combination with high frequency threshold information derived with the Auditory Brainstem Response. The project aims to develop a clinical hearing test based on the Middle Latency and 40 Hz Response that will be applicable to the very young and hard-to-test patient.

MENDEL, MAURICE PRUTTING, CAROL MYLES-ZITZER, CATHLEEN	NSF	7/01/87 6/30/88	\$73,597	Denied
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**Cerebral Specialization in Late Learner Acquisition of Sign Language**

The proposed research will document inter-hemispheric differences in cerebral specialization of adults as a function of late learners' acquisition of American Sign Language (ASL). Evidence of differences in lateralization of peripheral visual event processing between late learners of ASL and non-signers would suggest a re-examination of the "critical period" learning theory.

PHILLIPS, LLAD	NIJ	06/15/87 10/31/87	\$10,000	Funded \$10,000
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**Identifying the Special Employment Services Needed to Successfully Place Ex-Offenders in Jobs\***

Using data from the Lazar Institute's study on employment services for ex-offenders, this research will investigate which particular services received through job placement programs explain the increased likelihood of employment for ex-offenders, and the effect job placement has on recidivism to crime.

\*Proposal not submitted through ORDA.

**APPENDIX A-1 (continued)  
Proposals Submitted 1986/87**

<b>PI(s)/ Grant #</b>	<b>Funding Agency</b>	<b>Period of Award</b>	<b>Amount Requested</b>	<b>Status/ Funded</b>
<b>PHILLIPS, LLAD VOTEY, HAROLD</b>	<b>NSF</b>	<b>7/01/87 6/30/89</b>	<b>\$116,521</b>	<b>Pending</b>

**The Choice to be Involved in Schooling, Work and Crime By Youth**

The researchers propose to estimate a multinomial model of choice based on threshold for participation by youth in work, crime and schooling. Data from the National Longitudinal Surveys will be used to estimate the effects these factors and previous contact with the criminal justice system have in the decision making process to engage in crime.

<b>PHILLIPS, LLAD VOTEY, HAROLD</b>	<b>NIJ</b>	<b>10/01/87 12/31/88</b>	<b>\$109,998</b>	<b>Denied</b>
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**The Development and Testing of An Integrated General Decision Theory Model of Criminal Behavior by Youth:  
Part 1**

The objective of this proposal is to develop and test a theory of criminal behavior that is based on the optimization of individual satisfaction (utility) under various externally imposed constraints. This theory will be developed for empirical testing so that its conclusions can be applied in formulating public policy.

<b>SMITH, TERRY</b>	<b>US Dept. of the Interior</b>	<b>7/01/87 7/31/88</b>	<b>\$55,000*</b>	<b>Pending</b>
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**A Spatial Data Base for Improved Query Response Together With Image Processing and Vector Input Capabilities for KBGIS-II**

Support is requested to implement improvements and extend capabilities of a previously developed geographic information system (KBGIS-II). These enhancements will include faster query response times, image processing capabilities, and improved procedures for storage, analysis and conversion of vector based input data.

<b>SMITH, TERRY DOHERTY, SALLY</b>	<b>NSF</b>	<b>01/01/87 12/31/87</b>	<b>\$48,060</b>	<b>Denied</b>
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**A Computational Model of Spatial Navigation**

The research proposes to complete the conceptual model of long term memory (LTM) for a previously developed computation process model of spatial navigation, (NAVIGATOR), and to implement the entire computational model of spatial navigation. Experimental simulations will be run to test the assumptions of the model and the resulting data will be analyzed for systemic trends in the output.

\*Budget request revised from \$60,252 to \$55,000.

**APPENDIX A-1 (continued)  
Proposals Submitted 1986/87**

<b>PI(s)/ Grant #</b>	<b>Funding Agency</b>	<b>Period of Award</b>	<b>Amount Requested</b>	<b>Status/ Funded</b>
STUART, CHARLES	NSF	7/01/87 6/30/89	\$47,716	Pending

**Natural Selection of Economic Behavior: Formalization and Implications**

The proposal's general objective is to develop formal methods for characterizing naturally selected economic behavior. By studying formally how resource allocation influences selection of economic behavior, the research will attempt to provide an analytic bridge between economics and biology.

VOTEY, HAROLD	NIJ	06/15/87 10/31/87	\$10,000	Funded \$10,000
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**The Relationship Between Employment and Crime: Examination of the Vera Institute Data\***

The proposal's objective is to study whether changes in economic opportunities made available to youth will moderate the degree of involvement in crime for a given age level. The principal investigator will also study the impact prior sanctions have on the degree of involvement in crime as opposed to legitimate work. The data set to be used in this analysis is the ICPSR Data Set from the Vera Institute of Justice.

VOTEY, HAROLD	Alfred P. Sloan Foundation	5/9/87 5/9/87	\$10,000	Denied
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**Conference on the Foundation of Monetary Theory\***

Support is requested for a one-day conference on the foundation of monetary theory, to be held at UCSB.

WEATHERFORD, M. S.	NSF	7/01/87 1/31/89	\$76,224	Pending
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**Estimating the Dynamics of Policy Performance and Political Trust**

The proposed research will formulate and test several alternative interpretations of the sources of variation in the public's political trust. Using survey data from a variety of sources, the researcher will estimate the stability of political trust and the extent to which policy evaluations and trust have covaried over the last three decades.

WILLIAMS, RON Riverside 05526	County of Riverside	9/01/86 6/30/87	\$12,394	Funded \$12,394
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**Riverside County Census Tract Specific Maternal and Child Health Data Base**

This proposed research will produce a Maternal and Child Health Data Base by census tract within Riverside County for the 1982-84 birth cohorts and develop software for use in analyzing the data.

\*Proposal not submitted through ORDA.

Community and Organization Research Institute

PI(s)/ Grant #	Funding Agency	Period of Award	Amount Requested	Status/ Funded
WILLIAMS, RON 86-88507 MOU 5	Calif. Dept. of Health Services	7/01/86 6/30/87	\$9,438	Funded \$9,438

**Del Amo Landfill Maternal and Child Health Data Base Study**

Perinatal and birth data derived from census tract-specific/area-specific values for selected regions in Los Angeles County will be compared to birth data from the Del Amo landfill area census tract. The data will be reported over the 1978-84 period and the annual data will be tested for a trend over the studied period.

WILLIAMS, RON 86-88507 MOU 6	Calif. Dept. of Health Services	12/1/86 6/30/87	\$7,890	Funded \$7,890
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**1978-1984 BKK Landfill Maternal and Child Health Data Base Study**

Continuation of a project that is developing census-tract/area-specific values for selected regions in Los Angeles County utilizing the 1978 through 1982 *California Birth Cohort Data for Several Reproductive Outcomes*.

WILLIAMS, RON 87-91205	Calif. Dept. of Health Services	7/01/87 6/30/88	\$253,000	Funded
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**Maternal and Child Health Data Base: Development, Application and Dissemination**

Continuation of a project that is maintaining, augmenting and updating the Maternal and Child Health Data Base (MCHDB) for use in assessing perinatal care in California. The project is also in the process of initiating usage of the Automated Vital Statistic System (AVSS) in California district health departments, thereby increasing accuracy and timeliness of the MCHDB.

WILLIAMS, RON 86-89393	Calif. Health and Welfare Services	7/01/86 6/30/87	\$153,731	Funded \$163,963
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**AVSS Training and Consulting Support**

Continuation of a project that is providing the necessary personnel and consulting services to California registrars of births and deaths implementing and operating AVSS.

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Number of Proposals Submitted FY-86/87:	33
Amount of Support Requested:	\$2,366,643
Amount Awarded:	\$ 610,092
Number of Proposal Submitted from Previous Fiscal Years, Awarded FY-86/87:	9
Amount awarded FY-86/87:	\$ 572,584
<b>TOTAL AMOUNT AWARDED FY-86/87:</b>	<b>\$1,182,676</b>

**APPENDIX A-2  
INTRAMURAL RESEARCH ACTIVITY**

<b>Principal Investigator</b>	<b>Agency</b>	<b>Title</b>	<b>Fund No.</b>	<b>Amount Funded</b>
J. Sonstelie	Vice Chanc. Urgent Needs	Macro Economics Conference	19900.7	\$9,000
J. Cronshaw	Vice Chanc. Urgent Needs	Phloem Transport Conference	19900.7	\$1,000
R. Klatzky	Vice Chanc. Urgen Needs	Hand Configuration	19900.7	\$1,508
R. Golledge	Vice Chanc. Urgent Needs	Analysis Without Sight	19900.7	\$2,871
T. Smith	Vice Chanc. Urgent Needs	Computational Model	19900.7	\$3,942
W. Mead	UERG		19900	\$22,250
T. Smith	Cal Space		19900	\$9,987
S. Fisher	Minigrant	Soc. # Rev.	19904	\$1,004
C. Hollister		Domeday Project	09534	\$6,650
J. Sonstelie	ORDA	Macro Economics Conference	07427.7	\$1,000
H. Votey/ CORI	ORDA	Computer	07427.7	\$4,040
S. Doherty	ORDA	CSSCAP	07425.5	\$43,109
D. Morgan	ORDA	Travel American Water Resources	05397.7	\$450
J. Sonsteli	ORDA	Macro Econ. Conference	05397.7	\$5,000
H. Votey	ORDA	Travel to Washington	05397.7	\$115
H. Votey	ORDA	B. Hagen Replacement	05397.7	\$418
H. Votey/ CORI	ORDA	Miscellaneous	05397.7	\$842

**APPENDIX A-2**  
**INTRAMURAL RESEARCH ACTIVITY** (continued)

<u>Principal Investigator</u>	<u>Agency</u>	<u>Title</u>	<u>Fund No.</u>	<u>Amount Funded</u>
H. Votey/ CORI	ORDA	Computer	05397.7	\$5,000
H. Votey/ CORI	ORDA	2213 Room Renovation	05397.7	\$5,000
			<b>TOTAL</b>	<b>\$122,344</b>



**APPENDIX B-1**

**1-A) UCSB Academic staff engaged in research**

**a. Faculty**

<u>Name</u>	<u>Department</u>	<u>Funding Agency</u>
Bielby, D.	Sociology	NSF
Bielby, W. T.	Sociology	NSF
Borjas, G.	Economics	Upjohn Foundation
Botkin, D.	Environmental Studies	CA Dept. of Fish & Game
Cronshaw, J.	Biological Science	UCSB Foundation
Fisher, S.	Sociology	Instructional Development
Hollister, C. W.	History	NEH, UCSB Foundation
Klatzky, R.	Psychology	AFOSR, ONR
Melack, J.	Biology	CA Dept. of Fish & Game
Mead, W. J.	Economics	UERG, UERG
Messick, D.	Psychology	Sloan Foundation
Pellegrino, J.	Psychology and Education	University of Washington
Phillips, L.	Economics	NSF
Shapiro, P.	Economics	NSF
Smith, T. R.	Geography and Computer Science	NASA
Votey, H. L.	Economics	NSF

**b. Professional Researchers**

Williams, R. L.	CORI	CA Dept. of Health, NIH
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**c. Postgraduate Researchers**

Doherty, S.	Psychology	CSSCAP
Graves, G.	History	UCSB Foundation
McDonald, T.	Psychology	University of Washington

**d. Specialists**

Englehart, L.	CORI	CA Department of Health
Fleming, R.	History	NEH
Garcia, D.	CORI	CA Department of Health
Mack, K.	History	NEH
Rust, F. P.	CORI	CA Department of Health
Rust, K.	CORI	CA Department of Health

**e. Graduates**

Abate, R. J.	Computer Science	University of Washington
Allison, S.	Economics	Center for Decision Science
Balakrishnan, J.	Psychology	ONR
Denning, M.	Economics	UERG
Dubaya, R.	Geography	NASA
Emrich, S.	Economics	NSF
Fischer, S.	Education	University of Washington
Ganderton, P.	Economics	NSF
Gracen, T.	Geography	University of Washington
McCloskey, B.	Psychology	ONR
Menon, S.	Computer Science	NASA
Mitchell, S.	Geography	University of Washington
Ruud, M.	History	UCSB Foundation
Vella, F.	Economics	Upjohn Foundation

**f. Undergraduates**

Cole, K.	CORI	CA Dept. of Health
Doyle, J.	Computer Science	CA Dept. of Health
Glaser, H.	Sociology	Instructional Development
Lawrence, J.	Psychology	ONR

**1-B) Participation from other campuses, institutions, industry, and the community**

**a. Researchers**

**Faculty**

Bergstrom, T., Professor of Economics, University of Michigan, Co-Principal Investigator on Grant No. NSF SES-84-09045

Cahil, T. A., Crocker Nuclear Laboratory, UC Davis, Principal Investigator on a grant from the California Department of Fish and Game

Jehl, J. R., Jr., Hubbs Marine Research Institute, San Diego, CA, on a grant from the California Department of Fish and Game.

Rubinfeld, D., Professor of Law and Economics, UC Berkeley, Co-Principal Investigator, on Grant No. NSF SES84-09045

Stine, S., Department of Geography, UC Berkeley, on a grant from the California Department of Fish and Game

Winkler, D. W., Division of Biological Sciences, Cornell University, on a grant from the California Department of Fish and Game.

**b. Seminar Speakers**

**Cognitive Science Seminars:** R. Klatzky, J. Pellegrino, T. Smith, Directors

Acredolo, L., UC Davis  
Hindreth, E., MIT  
Kosslyn, S., Harvard University  
Lave, J., UC Irvine  
Rieser, J., Vanderbilt Univ.  
Warren, D., UC Riverside

Grossberg, S., Boston University  
Hinton, G., Carnegie-Mellon University  
Lakoff, G., UC Berkeley  
Palm, G., Max-Planck Institute  
Suchman, L., Xerox Corp.

**c. Panel Members**

**Mono Lake Project:** D. Botkin and H. L. Votey, Directors

Edmondson, W. T., Department of Zoology, University of Washington  
Everett, Lorne, Hydrologist, Natural Resources Program, Kaman Tempo  
Patten, Duncan F., Center for the Environment, Arizona State University  
Wiens, John A., Department of Biology, University of New Mexico

**d. Conference Speakers**

**Models of Money and Monetary Institutions Conference.** May 9, 1987, UCSB.

King, R. G., University of Rochester  
Peled, D., Carnegie-Mellon University  
Smith, B., University of Western Ontario

Kydland, F., Carnegie-Mellon University  
Sargent, T., Hoover Institute

**APPENDIX B-2A**  
**Employees on University Funds**

<b>CORI</b>	<u>% FTE</u>
Votey, H. L., Director	.40
Shapiro, P., Associate Director	
Smith, T. R., Associate Director	
<b>Staff:</b>	
Cornet, J. A., Administrative Assistant (Career)	1.00
Dandona, J., Sr. Word Processing Specialist (Career)	.50
McDaniel, I., Principal Clerk (Career)	1.00
<b>Center for the Study of Spatial Cognition and Performance</b>	
Klatzky, R., Associate Director	
Pellegrino, J. W., Associate Director	
Smith, T. R., Associate Director	
<b>Professionals:</b>	
Doherty, S., Postgraduate Research Psychologist (Career)	1.00
<b>Staff:</b>	
McKintosh, J., Sr. Typist Clerk (Casual)	.50
Seagal, P., Programmer (Casual)	.14
<b>Students:</b>	
Cicinelli, J., Research Assistant, 2/1/87-6/30/87	.06
Gopal, S., Research Assistant, 1/1/87-6/30/87	.19
<b>Center for the Study of Decision Science</b>	
Messick, D. M., Associate Director	
Shapiro, P., Associate Director	
<b>Students:</b>	
Allison, S., Research Assistant, 9/1/86-12/31/86	.08
Ganderton, P., Research Assistant, 8/1/86-10/31/86	.01
<b>Instructional Development</b>	
Fisher, S., Research Sociologist	
<b>Students:</b>	
Glazer, H., 12/1/86-6/30/87	.06

**APPENDIX B-2B**  
**Employees on Non-University Funds**

	<u>% FTE</u>
<b>Airforce Office of Scientific Research</b>	
Klatzky, R., 6/15/87-6/30/87	.04
<b>California Department of Fish and Game</b>	
Botkin, D., Research Biologist	.04
<b>Staff:</b>	
Campbell, L., Admin. Assistant (Casual)	.18
<b>California Health Services 85-86786</b>	
Williams, R. L., Associate Research Economist	
<b>Professionals:</b>	
Englehart, L., Jr. Specialist, 7/1/86-8/31/86	.13
Rust, F. P., Associate Specialist, 7/1/86-8/31/86	.08
Rust, K., Assistant Specialist, 7/1/86-8/31/86	.17
<b>Staff:</b>	
Marinko, J., Programmer, 7/1/86-8/31/86	.17
<b>Students:</b>	
Doyle, J., Assistant, 7/1/86-8/31/86	.08
<b>California Health Services 85-86888</b>	
Williams, R. L., Associate Research Economist	
<b>Professionals</b>	
Falkenberg, R. H., Sr. Admin. Analyst, 7/1/86-8/31/86	.17
Morales-Falkenberg, E., Admin. Analyst, 7/1/86-8/31/86	.08
Rust, F., Assoc. Specialist, 7/1/86-8/31/86	.08
<b>California Health Services 86-89089</b>	
Williams, R. L., Associate Research Economist, 10/1/86-6/30/87	
<b>Professionals:</b>	
Garcia, D, Jr. Specialist, 9/1/86-11/30/86	.12
Rust, K., Assistant Specialist, 9/1/86-6/30/87	.83
<b>Staff:</b>	
Chen, P., Programmer, 10/1/86-6/30/87	.56
Marinko, J., Programmer, 9/1/86-6/30/87	.75
<b>Students:</b>	
Cole, K., Assistant, 2/1/86-6/30/87	.10
Doyle, J., Assistant, 9/1/86-12/31/86	.10

Community and Organization Research Institute

<b>California Health Services 86-89393</b>	<u>% FTE</u>
Williams, R. L., Associate Research Economist	.08
<b>Professionals:</b>	
Falkenberg, R. H., Sr., Administrative Analyst, 7/1/86-6/30/87	1.0
Morales-Falkenberg, E., Administrative Analyst, 7/1/86-6/30/87	.50
Rust, F., Associate Specialist	.50
<b>Staff:</b>	
Chen, P., Programmer, 10/1/86-6/30/87	.08
Marinko, J., Programmer, 9/1/86-6/30/87	.08
<b>California Health Services 86-88507</b>	
Williams, R. L., Associate Research Economist	
<b>Professionals:</b>	
Garcia, D., Jr. Specialist, 6/1/87-6/30/87	.06
<b>Students:</b>	
Cole, K., Assistant, 6/1/87-6/30/87	.05
<b>California Health Services 86-88507</b>	
Williams, R. L., Associate Research Economist	
<b>Professionals:</b>	
Garcia, D., Jr. Specialist, 3/1/87-5/31/87	.19
<b>California Health Services-Riverside 05526</b>	
Williams, R., Associate Research Economist	
<b>Professionals:</b>	
Garcia, D., Jr. Specialist, 12/1/86-2/28/87	.17
<b>National Institute of Health Services MCJ 063211</b>	
Williams, R., Associate Research Economist	
<b>Staff:</b>	
Chen, P., Programmer, 7/1/86-9/30/86	.25
<b>Office of Naval Research N00014-86-K-0232</b>	
Klatzky, R., Research Psychologist	.08
<b>Students:</b>	
Balakrishnan, J., Research Assistant	.04
Lawrence, J., Assistant	.01
McCloskey, B., Research Assistant	.04
<b>NASA NGT055-010-805</b>	
Smith, T., Research Geographer and Computer Scientist	
<b>Students:</b>	
Dubayah, R., Graduate Fellowship Recipient	

Community and Organization Research Institute

	<u>% FTE</u>
<b>NASA NCC2-359</b>	
Smith, T., Research Geographer and Computer Scientist	
Peuquet, D., Assistant Research Geographer	
<b>Students:</b>	
Menon, S., Research Assistant, 7/1/86-10/31/86	.27
<b>National Science Foundation SES86-06322</b>	
Phillips, L., Research Economist	.08
Votey, H., Research Economist	.08
<b>National Science Foundation SES84-09045</b>	
Shapiro, P., Research Economist	
Bergstrom, T., Research Economist	
Rubinfeld, D., Research Economist	
<b>Students:</b>	
Emrich, S., Research Assistant, 2/10/87-6/30/87	.03
<b>National Science Foundation SES85-10172</b>	
Bielby, D., Associate Research Sociologist	
Bielby, W., Research Sociologist	
<b>National Endowment for the Humanities RT 20213</b>	
Hollister, C., Research Historian	
<b>Professionals:</b>	
Fleming, R., Assoc. Specialist, 7/1/86-6/30/87	.37
Mack, K., Assistant Specialist, 7/1/86-6/30/87	.35
<b>UCSB Foundation Phloem Transport</b>	
Cronshaw, J., Research Biologist	.08
<b>UCSB Foundation Domesday Book Data Base</b>	
Hollister, C. W., Research Historian	
<b>Professionals:</b>	
Mack, K., Assistant Specialist, 10/1/86-3/31/87	.20
Graves, G., Postgraduate Researcher, 7/1/86-10/31/86	.17
<b>Students:</b>	
Ruud, M., Research Assistant, 7/1/86-9/30/87	.11
<b>Universitywide Energy Research Group</b>	
Mead, W. J., Research Economist	.02
<b>Students:</b>	
Denning, M. A., Research Assistant, 7/1/86-6/30/87	.49
<b>Upjohn 86-04-60</b>	
Borjas, G., Research Economist	.21
<b>Students:</b>	
Vella, F., Research Assistant, 7/1/86-9/30/86	.19

Community and Organization Research Institute

University of Washington

Pellegrino, J., Research Educator and Psychologist

% FTE

.17

**Professionals:**

McDonald, T., Postgraduate Research Assistant, 1/1/87-6/30/87

.21

**Staff:**

Seagal, P., Programmer, 9/1/86-6/30/87

21

**Students:**

Abate, R., Research Assistant, 9/1/86-6/30/87

.35

Fischer, S., Research Assistant, 8/1/86-6/30/87

.19

Gracen, T., Research Assistant, 9/1/86-2/28/87

.13

Mitchell, S., Research Assistant, 10/1/86-6/30/87

.35



## APPENDIX B-3

## CURRENT SPACE ASSIGNMENTS

North Hall			Square Feet
1013	Research Office	Schniepp, M., Assistant Research Economist	150
1015	Research Office	NSF - Phillips, L.	150
1017	Research Office	NSF - Votey, H. L.	150
2201	Admin. Office	<b>CORI</b> Cornet, J., Administrative Assistant; McDaniel, I., Principal Clerk	345
2201A	Research Office	<b>California Department of Health Services</b> Williams, R. L., Associate Research Economist	138
2202	Word Processing Facility	<b>CORI</b> Dandona, J., Sr. Word Processing Specialist	247
2204	Admin. Office	<b>Center for the Study of Spatial Cognition and Performance (CSSCAP)</b> Klatzky, R., (Psychology) Pellegrino, J. (Education) Smith, T. R. (Geography and Computer Science) Doherty, S., Postgraduate Research Psychologist McIntosh, J., Senior Typist Clerk	264
2205	Research Office	<b>Center for Decision Science - Shapiro, P.</b> NSF	138
2206	Conference Room	<b>CORI/Economics Department</b> Pellish Room	345
2207	Research Office	<b>California Department of Health Services</b> <b>National Institute of Health - Williams, R. L.</b> Chen, P., Programmer -NEH Marinko, J., Programmer - CDHS	276
2209	Research Space Modules	<b>CORI</b> Rust, F., Specialist (Williams, CDHS) Rust, K., Specialist (Williams, CDHS) Burnett, R., Research Assistant (Shapiro/Votey, NSF/NIJ) Doyle, J., Assistant (Williams, CDHS) Cole, K., Assistant (Williams, CDHS) Garcia, D., Jr. Specialist (Williams, CDHS) Fleming, R., Assoc. Specialist (Hollister NEH)	437

**CURRENT SPACE ASSIGNMENTS (continued)**

<b>North Hall</b>			<b>Square Feet</b>
2208	Conference Room	<b>CORI/Economics Department</b> Small Conference Room	437
2212	Conference Room	<b>CORI/Economics Department</b> Large Conference Room	607
2213	Computer Room	<b>CSSCAP</b> McDonald, T., Research Assistant Joglekar, U., Research Assistant McCloskey, B., Research Assistant Andre, K., Assistant	625
2214C	Computer Room	<b>California Department of Health Services</b> William, R. L., Associate Research Economist	192
<b>Ellison Hall</b>			<b>Square Feet</b>
2704	Research Office	<b>NEH Domesday Book - Hollister, W.</b> Fleming, R., Associate Specialist Lopez, V., Assistant	120
5805	Research Office	<b>NEH Domesday Book - Hollister, W.</b> Mack, K., Assistant Specialist Whitacre, M., Research Assistant Kaargard, B., Assistant	120