



NCRG

ANNUAL REPORT

2001





OUR MISSION

The National Center for Responsible Gaming (NCRG) was the first national organization exclusively devoted to funding scientific research on pathological and youth gambling. The NCRG was founded in 1996 to help individuals and families affected by gambling disorders by:

- Supporting the finest peer-reviewed basic and applied research on gambling disorders.
- Encouraging the application of new research findings to improve prevention, diagnostic, intervention and treatment strategies.
- Enhancing public awareness of pathological gambling and youth gambling.



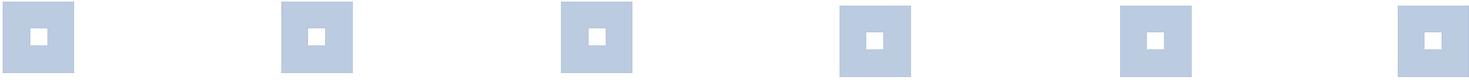


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MESSAGE

MESSAGE FROM THE CHAIRMAN



The year 2001 was a pivotal time for the world. The events of Sept. 11 changed the way we view our lives, our goals and our values. For many it created a desire to make changes, make better choices and to help others. Now, more than ever, the National Center for Responsible Gaming (NCRG) strives to do its part in aiding others by working toward its goal of helping individuals affected by gambling disorders.

The NCRG made great strides toward this objective in 2001. In its sixth year, the NCRG continued to support only the highest-quality scientific research on pathological and youth gambling. To this end, the Institute for Research on Pathological Gambling and Related Disorders — which has assumed the grantmaking function of the NCRG — selected four investigative projects, through its stringent peer-review criteria, for funding in 2001. Projects requesting a total of \$677,611 were selected for support and are scheduled to begin in 2002.

As new projects were funded, many existing NCRG-funded studies unveiled their findings in 2001 and were published in a number of peer-reviewed academic journals, including *Biological Psychiatry*, *Canadian Journal of Public Health*, *Journal of Gambling Studies*, *Journal of Nervous and Mental Disease* and *Neuron*.

The education aspect of the NCRG's mission also was alive and well in 2001. The NCRG held its third annual conference, titled "Toward Meaningful Diagnosis of Gambling Disorders: From Theory to Practice." The conference attracted 140 attendees, including academic researchers, treatment providers, public policy-makers, gaming regulators, gaming industry employees and staff from state councils on problem gambling.

The NCRG also provided support for the Second International Think Tank on Youth Gambling, co-sponsored by McGill University's International Centre for Youth Gambling Problems and High-Risk Behaviors and Harvard Medical School's Division on Addictions. The think tank gathered some of the brightest minds in the field of youth gambling research to address youth gambling as a public health issue.

And finally, as you will read in more detail in the pages of this report, the NCRG received more than \$250,000 from fund-raising efforts in 2001, in addition to annual commitments of more than \$900,000. Since its founding — with the contributions of the casino industry and related organizations — more than \$7 million has been committed to the NCRG. This financial support has enabled the NCRG to create a strong education program and advance scientific breakthroughs in the field of gambling research.

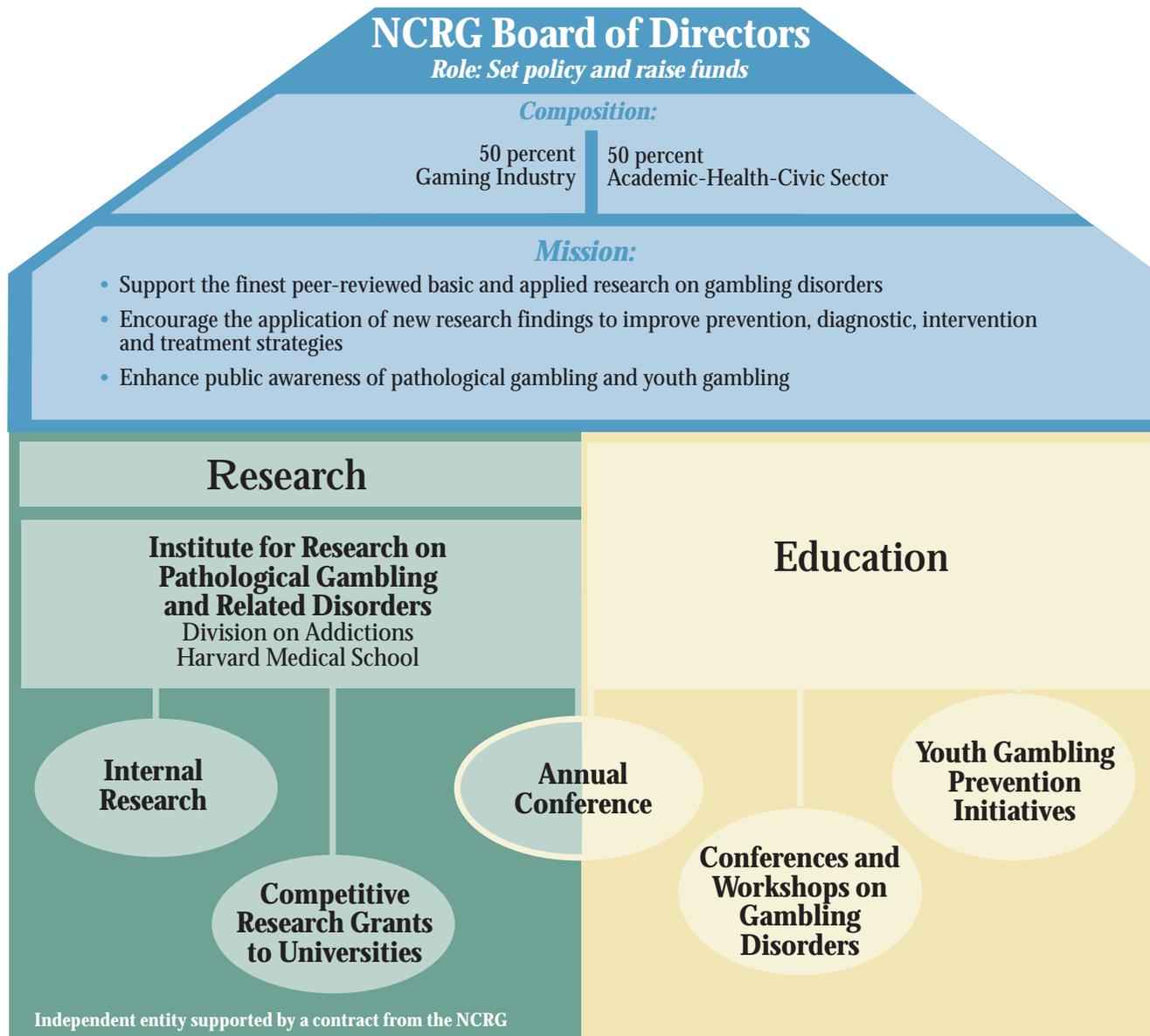
So, as the NCRG enters its seventh year, I want to take the opportunity to thank all of the Center's contributors for their generous support. All of you have made the Center's goals more attainable not only through your generous donations, but by your belief and support of the research and education programs that are the core of the NCRG's mission.

We look forward to an exhilarating 2002, during which we will continue to break new ground in gambling research and persevere toward our aspiration of helping others.

Sincerely,

Maj. Gen. Paul A. Harvey (Ret.)
Chairman

NCRG STRUCTURE & PROGRAMS



For more information on gambling research and the annual conference, contact:

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NCRG BOARD OF DIRECTORS

The National Center for Responsible Gaming (NCRG) is a tax-exempt, nonprofit organization founded in 1996 to address pathological and youth gambling through research and public education. According to the NCRG's bylaws, at least 50 percent of the governing board must represent sectors other than the gaming industry. The following individuals served on the board of directors in the year 2001:

Officers

Maj. Gen. Paul A. Harvey, Chairman
President/Owner
PDH Associates

William Boyd, President
Chairman and CEO
Boyd Gaming Corporation

Judy L. Patterson, Secretary and Treasurer
Senior Vice President and Executive Director
American Gaming Association

Board of Directors

Thomas Baker
President and CEO
International Game Technology

Robert Boswell
Senior Vice President
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Thomas J. Brosig

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Of Counsel
The Peters Law Firm

Glenn Christenson
Executive Vice President, CFO
and CAO
Station Casinos, Inc.

Sue Cox
Founding Executive Director
Texas Council on Problem and
Compulsive Gambling

Dennis E. Eckart
President and CEO
Greater Cleveland Growth
Association

Frank J. Fahrenkopf, Jr.
President and CEO
American Gaming Association

Alan Feldman
Senior Vice President, Public
Affairs
MGM MIRAGE™

John M. Gallaway
President and COO
Isle of Capri Casinos, Inc.

David A. Korn, M.D.
Assistant Professor
Department of Public Health
Sciences
University of Toronto

Phillip Martin
Tribal Chief
Mississippi Band of Choctaw
Indians

Brian McKay
Of Counsel
Lionel Sawyer & Collins

Kevin P. Mullally
Executive Director
Missouri Gaming Commission

Carol O'Hare
Executive Director
Nevada Council on Problem
Gambling

James B. Perry
President and CEO
Argosy Gaming Company

Philip G. Satre
Chairman and CEO
Harrah's Entertainment, Inc.

Glenn Schaeffer
President, CFO and Treasurer
Mandalay Resort Group

Howard J. Shaffer, Ph.D.
Director, Division on Addictions
Harvard Medical School



CONTRIBUTORS†

The National Center for Responsible Gaming (NCRG) welcomed Sky City Casino, a Pueblo of Acoma gaming establishment in Acoma, N.M., as a new donor in 2001. NCRG board members, gaming employees and nongaming individuals have joined the following companies and organizations in generously supporting the NCRG:

Founding Contributor

Boyd Gaming Corporation provided the start-up costs for the NCRG in 1996 and made a 10-year pledge of \$875,000 between 1997 and 2006.

Contributors 1997-2002

\$1,350,000*

Park Place Entertainment Corporation/
Grand Casinos, Inc./
Hilton Hotels Corporation/
Caesars World, Inc.

\$100,000-\$299,000

Coast Resorts, Inc.
Hollywood Casino Corporation
Hotel Employees & Restaurant Employees International Union
Isle of Capri Casinos, Inc.
Pinnacle Entertainment, Inc.
Station Casinos, Inc.

\$875,000

Boyd Gaming Corporation
(10-year pledge)

\$600,000

International Game Technology
The Lincy Foundation
Mandalay Resort Group
MGM MIRAGE™

\$50,000-\$99,000

Argosy Gaming Company
Casino Data Systems
Empress Riverboat Casinos, Inc.
Horseshoe Gaming, Inc.
JCM American Corporation
Mississippi Band of Choctaw Indians
Shuffle Master Gaming

\$585,000**

Harrah's Entertainment, Inc./Harveys Casino Resorts/
Rio All-Suite Hotel & Casino/ Showboat, Inc.

\$10,000-\$49,000

Foxwoods Resort Casino
Mission Industries
Mohegan Sun
Sandia Casino
Sky City Casino, Pueblo of Acoma
Southern Wine and Spirits of Nevada

\$300,000

Aztar Corporation

†NCRG board members, gaming employees and nongaming individuals also have made generous contributions to the NCRG. Individual support for the NCRG is encouraged and welcome.

*Park Place Entertainment Corporation was formed when Hilton Hotels Corporation acquired Grand Casinos, Inc., and Caesars World, Inc. The contribution listed above reflects previous grants and commitments made by these companies.

**The amount reflects donations by Rio All-Suite Hotel & Casino and Showboat, Inc., which were acquired by Harrah's Entertainment, Inc., in 1998.



2001 JCM-AGA Gaming Golf Classic

JCM American Corporation and the American Gaming Association (AGA) sponsored the third annual JCM-AGA Gaming Golf Classic on May 21, 2001 to benefit the NCRG. Held at the TPC at Summerlin in Las Vegas, the event raised \$50,000. Bill Acosta of the Flamingo joined auctioneer Christian Kilberg in conducting the charity auction held after the tournament.

The following companies supported this event through sponsorship or participation:

- | | |
|--------------------------------------|-----------------------------------|
| Acres Gaming | IC Group |
| Action On-Line | International Game |
| Alliance Gaming Corporation | Technology |
| American Gaming & Electronics (AG&E) | Konami Gaming, Inc. |
| Anchor Gaming | MGM MIRAGE™ |
| Argosy Gaming Company | Monte Carlo |
| Aristocrat Technologies, Inc. | Ocean Forest |
| Atronic Americas | PDS Financial Corp |
| Bally/Alliance Gaming | PDS Gaming |
| Bellagio | Petty Driving Experience |
| Boyd Gaming Corporation | Railroad Pass Hotel & Casino |
| Casino Data Systems | Reed Exhibitions |
| Channel 13 | San Remo's Saizen |
| Channel 8 | Sankyo USA Corp |
| Chateau Julien Wine Estates | Scenic Airlines |
| Coast Resorts, Inc. | SDG Games |
| Colorado Bell | Seagram Americas |
| El Portal Luggage | Sega Gaming Technology |
| Ernst & Young LLP | Shuffle Master Gaming |
| Flamingo | Sigma Game Inc |
| Flower Peddler | Southern Wine & Spirits of Nevada |
| GEM Communications | Southwest Print Source |
| Global Cash Access | Sushi on Summerlin |
| Global Gaming Expo | TPC Summerlin |
| Golf Augusta Pro Shops | The Venetian Resort Hotel Casino |
| Greenspun Media Group | Walters Golf |
| Hamada of Japan | Whole Grain |
| Happ Controls | Natural Bread Co. |
| Harrah's Entertainment, Inc | WMS Gaming |
| Harveys Casino Resorts | Zeffirino |
| Hi-Tech Gaming | |
| Ho Ho Ho Chinese Gourmet | |



2001 AGA Awards Dinner Honoring America's Gaming Greats*

The first annual American Gaming Association (AGA) Awards Dinner Honoring America's Gaming Greats took place Oct. 2 at the Rio All-Suite Hotel & Casino in Las Vegas. All proceeds from the gala event benefited the National Center for Responsible Gaming (NCRG). The inaugural dinner was highly successful, with 650 people attending the dinner and induction ceremony and nearly \$180,000 raised to combat problem gambling. The 2001 America's Gaming Greats honorees were entertainer Paul Anka, U.S. Sen. Harry Reid (D-Nev.) for industry leadership and Boyd Gaming Corporation and Park Place Entertainment Corporation for special achievement in responsible gaming. Park Place Entertainment also was inducted into the "Million-Dollar Club," the first company to be recognized for donating an aggregate of \$1 million to the NCRG.

The following companies and individuals generously supported the 2001 AGA Awards Dinner Honoring America's Gaming Greats:

\$30,000

Bear, Stearns and Co., Inc.,
and Goldman Sachs & Co.

\$8,000

Boyd Gaming Corporation
International Game
Technology
Isle of Capri Casinos, Inc.

\$7,000

Bank of America

\$5,500

MGM MIRAGE™

\$5,000

Aristocrat Technologies, Inc.

\$4,500

Mandalay Resort Group
Marsh
Park Place Entertainment
Corporation

\$4,000

Tropicana Resort & Casino

\$3,500

Aladdin Gaming LLC
Argosy Gaming Company
Coca-Cola Fountain
Cohn & Wolfe
Coin Mechanisms, Inc.
Cooper Perskie April
Niedelman Wagenheim
& Levenson, P.A.
The Duberstein Group
Harrah's Entertainment, Inc.
Hyatt Gaming Services
Innovative Gaming
Corporation of America
(IGCA)
JCM American Corporation
Jefferies & Company, Inc.
Konami Gaming
Las Vegas Convention and
Visitors Authority
The Lincy Foundation
Roger & Sandy Peltyn/
Martin & Peltyn, Inc.
Mikohn Gaming
Corporation

Mississippi Band of
Choctaw Indians
Next Generation
Entertainment
The Palms Casino Resort
Pratt Industries
PricewaterhouseCoopers
Reed Exhibitions
Silverton Hotel & Casino
Southwest Gas Corporation
Station Casinos, Inc.
Steven G. Barringer P.L.L.C.
and McClure, Gerard &
Neuenschwander, Inc.
Wells Fargo
Claudine Williams
Wynn Resorts
\$1,000+
6HCO, LLC
Chrysalis Music Group
Cryptologic Inc.
The Friedmutter Group
Caroline & Sidney Kimmel
Shuffle Master Gaming

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Argyle Winery
Chalone Winery
China Grill
Ferrari-Carano Winery
Fiore Rotisserie
Flamingo Las Vegas
Four Seasons
Global Gaming Expo
Goetz Printing Corporation
Harrah's Entertainment, Inc.
The Mirage
Napa Restaurant
Nevada Color Litho
Paris Las Vegas
PRG
Prime Lens Productions
Red Square
Rio All-Suite Hotel &
Casino
Robert Mondavi Wineries
SculptChair International,
Inc.
Southern Wine & Spirits
of Nevada
Spago
Video Solutions

*Formerly the Gaming Hall of Fame Charity Dinner and Induction Ceremony

Institute for Research on Pathological Gambling and Related Disorders Division on Addictions, Harvard Medical School

The National Center for Responsible Gaming (NCRG) supports high-quality research on gambling disorders through its funding of the Institute for Research on Pathological Gambling and Related Disorders, based at the world's preeminent institution in medical research and education. Modeled after the National Institutes of Health (NIH), the Institute conducts both intramural research and competitively funded extramural research at educational, medical and research institutions worldwide.

Intramural Research

In 2001 the Institute's internal research program followed several avenues of investigation. First, the Institute's research team worked with the Harvard School of Public Health College Alcohol Study (CAS) to integrate questions about gambling into CAS's ongoing survey of more than 14,000 students at 120 four-year colleges in 40 states. The team will begin analyzing the data in 2002. This study will be the most comprehensive and rigorous investigation of gambling patterns among college students to date.

In collaboration with the Massachusetts Council on Compulsive Gambling, the Institute helped develop a minimal intervention response for help-line seekers unlikely or unable to get professional treatment. This guidebook, which provides an alternative for the high number of disordered gamblers who do not seek professional treatment, will be implemented and evaluated in 2002-03.

Finally, the Institute launched "Urges in Real and Retrospective Time," an innovative project testing the use of new technology to improve the accuracy of data collection. Using PDAs (personal digital assistants), treatment seekers will record their urges to gamble in real time rather than retrospectively, thereby providing a more accurate profile of the problem gambler's experience. This project, supported in part by Palm, Inc., will not only provide important information about addiction and cravings, but it will also test the viability and effectiveness of a new way of gathering data.

Extramural Research

The Institute's extramural program provides financial support for scientific investigations of gambling disorders by non-Harvard institutions. In 2001 the Institute received 60 letters of intent in response to a request for applications for social and behavioral science projects. The Institute's Program Advisory Board selected 30 of these letters to be developed into full grant proposals. Of the 30 investigators invited to apply, 29 submitted applications that were reviewed by a peer-review panel of distinguished scientists in the gambling and addictions fields. Using the stringent review criteria of the NIH to determine scientific merit, the panel selected four projects for funding. These projects, scheduled to begin in 2002, will focus on the genetics of gambling disorders, measures for studying treatment outcomes, and the prevalence and nature of gambling disorders among the elderly and schizophrenic patients.

Education and Dissemination

The Institute supports a variety of activities designed to connect the public with the newest research on gambling disorders. In 2001 weekly circulation of the online research bulletin *The WAGER* jumped from 9,000 to 15,000 people. *The New York Times* cited www.thewager.org and the Division on Addictions Web site as top Internet resources for information on gambling disorders (March 29, 2001). Other educational activities included cosponsorship of the conference "Toward Meaningful Diagnosis of Gambling Disorders: From Theory to Practice" (see page 10 for details) and the dissemination of "Facing the Odds: The Mathematics of Gambling and Other Risks," a middle-school mathematics curriculum now available online, free of charge, at www.hms.harvard.edu/doa/.



Photo courtesy: Richard Howard

Howard J. Shaffer, Ph.D., C.A.S., is the principal investigator of the Institute for Research on Pathological Gambling and Related Disorders at Harvard Medical School's Division on Addictions.

Program Advisory Board Membership

The Program Advisory Board is composed of distinguished academic researchers whose role is to counsel the Institute on all aspects of its program. The following individuals served on this board in 2001:

**Barry Kosofsky, M.D., Ph.D.,
Chairman**

Associate Neurologist
Massachusetts General Hospital
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Professor and Chairman
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Research Consultant
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Director, Center for Adolescent Substance
Abuse Research
University of Minnesota

Harold Wynne, Ph.D.

President
Wynne Resources, Ltd.
Research Consultant
Ontario Problem Gambling Research Centre

NCRG-Funded Research in Print

In 2001 the findings of research supported by the National Center for Responsible Gaming (NCRG) were published in a number of peer-reviewed academic journals on various aspects of gambling disorders. On the subject of treatment, Université Laval investigator Robert Ladouceur, Ph.D., and colleagues presented the results of a study on the effectiveness of cognitive therapy for disordered gamblers in the *Journal of Nervous and Mental Disease*. The investigators targeted the gamblers' erroneous perceptions about the randomness of probability and addressed issues of relapse prevention. Results indicated highly significant changes in the treatment group on all outcome measures, and analysis of data from six- and 12-month follow-ups revealed maintenance of therapeutic gains (Ladouceur, Sylvain, Boutin, Doucet, Leblond & Jacques, 2001).

Pharmacologic treatment of pathological gambling has shown promise as well. One NCRG-funded study released in 2001 found that the drug naltrexone significantly reduced gambling urges and behaviors among pathological gamblers. The clinical trial, conducted by the University of Minnesota, revealed that 75 percent of the patients receiving naltrexone (an opiod antagonist) improved in terms of their urges to gamble. Because of naltrexone's actions in the brain areas that process pleasure and urges, Suck Won Kim, M.D., the study's lead investigator, had theorized that this drug, usually used to treat narcotics and alcohol dependence, would be useful for treating pathological gambling. The authors warn that more research is needed beyond this preliminary study to determine the efficacy of this drug for gambling disorders (Kim, Grant, Adson, & Shin, 2001).

Two important studies on the prevalence of disordered gambling in the adult and youth populations were published in 2001. In the *Canadian Journal of Public Health*, Howard Shaffer, Ph.D., C.A.S., and Matthew Hall updated the prevalence estimates of gambling-related disorders in the United States and Canada first presented in the 1997 meta-analysis that was later published in the *American Journal of Public Health* (Shaffer, Hall & Vander Bilt, 1999). The original Harvard Medical School study, the result of the first grant awarded by the NCRG, was praised by the National Research Council of the National Academy of Sciences for providing the most reliable estimates of the rate of problem gambling (National Research Council, 1999). The updated analysis confirmed earlier findings of higher prevalence estimates among adolescent samples than among adult

samples for both clinical (level 3) and subclinical (level 2) measures of disordered gambling within both lifetime and past-year time frames (Shaffer & Hall, 2001).

With support from the NCRG, Randy Stinchfield, Ph.D., compared gambling levels among Minnesota public school students in 1992, 1995 and 1998. His study, published in the *Journal of Gambling Studies*, showed two opposite trends. On the one hand, the rate of student gambling declined in 1998. On the other hand, he found a small but growing number of twelfth-grade students who gambled frequently. In terms of trends over time for specific games, a declining number of ninth-graders participated in the lottery; however, there also was a significant increase in the number of twelfth-grade students who played the lottery weekly or more often. Stinchfield theorized that legalized gambling might be a new "rite of passage" for some of today's youth (Stinchfield, 2001).

In the review article, "The Neurobiology of Pathological Gambling," published in *Seminars in Clinical Neuropsychiatry*, NCRG-supported investigator Marc Potenza, M.D., observed that pathological gambling (PG), "like many other mental health disorders, is likely to involve the interplay between inherited and environmental factors," and that "multiple neurotransmitter systems have been implicated in the pathophysiology of PG" (Potenza, 2001).

Perhaps one of the most ground-breaking neuroscience studies funded by the NCRG was released in the leading journal *Neuron* in 2001. Hans Breiter, M.D., and colleagues from Massachusetts General Hospital used brain imaging to study the neural responses of human subjects engaged in gambling tasks. They discovered that an incentive unique to humans — money — produced patterns of brain activity that closely resembled patterns seen previously in response to other types of rewards. The study supports "the view that dysfunction of neural mechanisms and psychological processes crucial to adaptive decision making and behavior may contribute to a broad range of impulse disorders such as drug abuse and compulsive gambling" (Breiter, Aharon, Kahneman, Dale, & Shizgal, 2001).

The NCRG also has supported investigations of the genetic factor in the development of gambling disorders. "The Molecular Genetics of Pathological Gambling," a project by David Comings, M.D., has yielded numerous publications, including the 2001 article in *Clinical Genetics*. Comings and colleagues reported that genes influencing a range of brain functions play an additive role as risk factors for pathological gambling (Comings, Gade-Andavolu, Gonzalez, Wu, Muhleman, Chen, Koh, Farwell, Blake, Dietz, MacMurray, Lesieur, Rugle & Rosenthal, 2001).

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EDUCATION

The education dimension of the National Center for Responsible Gaming's (NCRG) mission is fulfilled through a variety of programs and activities. The NCRG strives to raise public awareness of pathological gambling; provide meaningful research-based education for clinicians, health providers and the gaming industry; and promote a lively exchange of ideas within the field of gambling research.

Annual Conference

“Toward Meaningful Diagnosis of Gambling Disorders: From Theory to Practice”

The NCRG's third annual conference was held Dec. 2-4, 2001 at The Mirage hotel-casino in Las Vegas. The two-day conference, which explored the issues associated with developing a clear definition of pathological gambling and methods for diagnosis, was sponsored by the NCRG, the Institute for Research on Pathological Gambling and Related Disorders at Harvard Medical School's Division on Addictions and the Nevada Council on Problem Gambling.

The conference attracted approximately 140 attendees, including academic researchers, treatment providers, public policy-makers, gaming regulators, gaming industry employees and staff from state councils on problem gambling, to continue the dialogue on gambling disorders.

The conference served as a forum to discuss the need for more research to help identify the nature of gambling disorders. The speakers discussed how the evolving definition of gambling disorders impacts screening and assessment instruments. Topics included how comorbidity complicates diagnosis; the viability of currently used screening and diagnostic instruments for special populations, such as youth and Native Americans; and the state of treatment practices.

This year an award was given for an outstanding poster that featured problem gambling research. The recipients were Renee Cunningham-Williams, Ph.D., Linda Cottler, Ph.D., and Samantha Books for the poster “Development of a Diagnostic Gambling Assessment: A Comprehensive Timeline.”



Linda Cottler, Ph.D., Renee Cunningham-Williams, Ph.D., and Samantha Books were recognized for their outstanding poster featuring problem gambling research at the NCRG's 2001 annual conference.

Publications

The National Center for Responsible Gaming (NCRG) contributes to the following publications that focus on problem gambling issues:

- The newly created *Responsible Gaming Quarterly* premiered in 2001 and is a joint publication of the NCRG and the American Gaming Association (AGA). The publication highlights initiatives throughout the industry, government, academia and the treatment community to address disordered gambling. The publication is an effort to pull together information from these diverse sources, all of which share a common goal: better prevention and treatment of gambling disorders.



- *The WAGER* is a weekly online research bulletin rated by *The New York Times* as one of the best Web sites on gambling research. The mission of *The WAGER*, which has a circulation of 15,000, is to gather, distill, and share resources in order to provide readers with a direct pipeline

to the latest information on pathological gambling.

Workshops and Youth Initiatives



Second International Think Tank on Youth Gambling as a Social and Public Health Issue

The NCRG provided support for the Second International Think Tank on Youth Gambling. The event, co-sponsored by McGill University's International Centre for Youth Gambling Problems and High-Risk Behaviors and Harvard Medical School's Division

on Addictions, was held May 4-6, 2001 at McGill University in Montreal. The think tank was successful in gathering some of the brightest minds in the field of gambling research to address youth gambling as a public health issue.

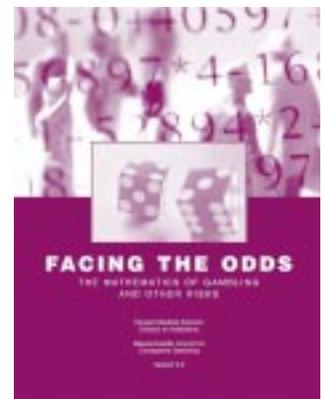
Participants included clinicians, public policy-makers, researchers and industry representatives, among others. Sixty-three people from nine countries contributed to the think tank, creating dialogue among representatives from Australia, Canada, Holland, Hong Kong, New Zealand, South Africa, Spain, the United Kingdom and the United States.

The mission of the think tank was "to identify and prioritize critical issues that need to be addressed in the development of an international public health agenda on youth gambling; recommend goals and action steps to address each critical issue; and establish committees to follow up on recommendations in each issue area." For more information or to obtain a summary report, contact Kathy D'Ovidio at 514-398-4438

"Facing the Odds: The Mathematics of Gambling and Other Risks"

The NCRG and the Division on Addictions at Harvard Medical School have teamed up to disseminate the groundbreaking curriculum "Facing the Odds: The Mathematics of Gambling and Other Risks."

Designed for use at the middle-school level, "Facing the Odds" presents statistics and probability in an integrated, engaging style. The goal of the curriculum is to increase students' interest in math and improve students' critical thinking ability, number sense and knowledge of the mathematics of gambling so they can develop rational views about gambling and make their own informed choices when confronted with gambling opportunities. The curriculum is available to educators free of charge online at www.hms.harvard.edu/doa/. For further information, contact Christine Reilly via e-mail at christine_reilly@hms.harvard.edu.





THE ADVANCEMENT OF AN EMERGING FIELD

Since the creation of the National Center for Responsible Gaming (NCRG) in 1996, the field of pathological gambling research has advanced to a new level. The field has expanded its research capabilities due to an unprecedented level of support from organizations, companies and individuals committed to funding scientific research for the study of gambling disorders that will aid in developing tools for prevention and treatment.

It wasn't until 1997 — through an NCRG-funded study by Harvard Medical School — that a reliable estimate of the prevalence of pathological gambling became available. The Harvard study found that approximately 1.1 percent of the population of the United States and Canada suffer from pathological gambling.

The results of this study, which were published in the *American Journal of Public Health* and later updated in the *Canadian Journal of Public Health*, have been praised by the National Research Council of the National Academy of Sciences as “the best current estimates of pathological and problem gambling among the general U.S. population and selected subpopulations... .” This study also has been a landmark tool for other researchers.

Other NCRG-funded investigations have expanded our understanding of gambling disorders. Because of the NCRG we now have:

- Promising treatment options, both pharmacologic and behavioral
- A new understanding of the brain's reward system and of how dysfunction in this area can contribute to pathological gambling
- Further evidence of the genetic factor in pathological gambling
- A greater understanding of the health risks of casino employees
- A clearer picture of how and why some adolescents develop gambling disorders

These advances have been made possible by NCRG support. Since 1996 the NCRG has awarded \$3.7 million to more than 20 leading research institutions in the United States and Canada and an additional \$2.4 million to Harvard Medical School in support of the Institute for Research on Pathological Gambling and Related Disorders. NCRG-funded research has been published in more than 40 peer-reviewed scientific publications and academic journals, including the *American Journal of Public Health*, *Addiction*, *American Journal of Medical Genetics*, *Annual Review of Public Health*, *Biological Psychiatry* and *Neuron*.

New NCRG-funded studies are under way to examine the neurobiology of gambling disorders, problem gambling among youth, clinical trials of various treatment and prevention strategies as well as the genetic roots of disordered gambling. These studies will lead the way to effective prevention and treatment of gambling disorders.

Today, with the contributions of the casino gaming industry and equipment manufacturers, vendors and related organizations, more than \$7 million has been committed to the NCRG. This financial support has enabled the NCRG to attract the best minds from the most prestigious institutions to conduct research in this uncharted field.

“The NCRG plays a very important role in the research and education surrounding problem gambling. I’ve attended two NCRG conferences and have come away from them with a renewed sense of direction for my casino’s problem gambling programs. I am able to focus on the important issues surrounding gambling disorders and spend money more efficiently on the programs that make a difference. As a result of the NCRG, the gaming community is acting upon the behaviors of problem gamblers in a much more responsible manner.”

Denis Floge, General Manager, Sky City Casino

The NCRG has been vitally important to advancing the scientific efforts of investigators interested in pathological gambling research. It boasts the largest number of funded grants devoted to gambling research of any organization, including the NIH. The NCRG should be commended for stepping up and taking responsibility for a large research effort that is unparalleled in any field in science today.

**Linda B. Cottler, Ph.D.,
Professor of Epidemiology
Washington University School of
Medicine, Department of Psychiatry**

“The NCRG’s role as an informed and objective purveyor of relevant information about problem gambling is a valuable tool in the battle with stereotypes and prejudices...its work is an important part of an informed national discussion.”

**Dennis Eckart, NCRG Board Member,
Former Member of Congress**

“The grant I received from the NCRG was critical during the early phase of my gambling research. The funds helped me complete a double-blind drug treatment trial, which has shown early signs of promise for pharmacologic treatment for pathological gambling disorders. Much more research is needed beyond this preliminary study, but it is rewarding to be on a path toward a better understanding of treatment alternatives.”

**Suck Won Kim, M.D,
University of Minnesota**

“Research from the NCRG has already helped to bring the study of pathological gambling into a new era of rigorous empiricism. Its portfolio of funded projects is both deep and broad, encompassing epidemiology, measurement, etiology and treatment. The NCRG has been so impressive so quickly that perhaps its biggest challenge for the future will be to maintain the high standard of excellence to which we are accustomed.”

Ken C. Winters, Ph.D., Associate Professor, Department of Psychiatry, University of Minnesota



2002 AND BEYOND

Research

The Institute for Research on Pathological Gambling and Related Disorders continues to collaborate with health and educational organizations throughout the nation on a variety of gambling-related education and research projects. Institute-sponsored research will be disseminated to the larger scientific community through publication in the following peer-reviewed journals:

- Shaffer, H.J. (in press). A critical view of pathological gambling and addiction: comorbidity makes for syndromes and other strange bedfellows. In G. Reith (ed.), *For Fun or Profit? The Controversies of the Expansion of Commercial Gambling*. New York: Prometheus Books.
- Shaffer, H.J., & Eber, G.B. (in press). Temporal progression of cocaine dependence symptoms in the national comorbidity survey. *Addiction*.
- Shaffer, H.J., & Freed, C.R. (in press). The assessment of gambling related disorders. In D.M. Donovan and G.A. Marlatt (eds.), *Assessment of Addictive Behaviors* (second ed.). New York: Guilford.
- Shaffer, H.J., Freed, C.R., & Healea, D. (in press). Gambling Disorders Among a Cohort of Homeless Substance Abusing Treatment Seekers. *Psychiatric Services*.
- Shaffer, H.J., & Hall, M.N. (in press). Longitudinal patterns of gambling and drinking problems among casino employees. *Journal of Social Psychology*.
- Shaffer, H.J., Hall, M.N., Vander Bilt, J., & George, E. (Eds.). (in press). *Youth, gambling & society: futures at stake*. Reno: University of Nevada Press.
- Shaffer, H.J., & Korn, D.A. (2002). Gambling and related mental disorders: a public health analysis, *Annual Review of Public Health* (Vol. 23, pp. 171-212). Palo Alto: Annual Reviews, Inc.
- Shaffer, H.J., & LaPlante, D. (in press). The treatment of gambling related disorders. In G. A. Marlatt and D.M. Donovan (eds.), *Relapse Prevention* (second ed.). New York: Guilford.

Education

Annual Conference

Dec. 8-10, 2002, Las Vegas

The National Center for Responsible Gaming (NCRG) and the Institute for Research on Pathological Gambling and Related Disorders will hold its annual conference Dec. 8-10, 2002 at The Mirage hotel-casino in Las Vegas. The three-day conference, titled "Rethinking Addiction: How Gambling and Other Behavioral Addictions are Changing the Concept and Treatment of Alcohol and Substance Use Disorders," will explore new ways of conceptualizing addiction and focus on the profound treatment implications of these ideas for both behavioral and substance use disorders. The conference will be co-sponsored by the Nevada Council on Problem Gambling. For more information, call 617-432-0297 or visit www.hms.harvard.edu/doa/institute.

NCRG Scientific Awards Program

The NCRG will hold its first annual awards program to honor individuals who have made exceptional scientific contributions to the field of pathological gambling research. Awards will be given exclusively on the scientific merits of nominees and will be presented at the 2002 annual conference sponsored by the NCRG and the Institute for Research on Pathological Gambling and Related Disorders.

Sponsors of the awards program include Argosy Gaming Company, Boyd Gaming Corporation, Harrah's Entertainment, Inc., MGM MIRAGE™ and Station Casinos, Inc.

Fund-Raising Events

JCM-AGA Gaming Golf Classic 2002

May 13, 2002, Henderson, Nev.

JCM American Corporation and the American Gaming Association (AGA) will sponsor the fourth annual golf tournament and auction to benefit the NCRG. The tournament will be held May 13, 2002 at the Revere at Anthem in Henderson, Nev.

AGA Awards Dinner Honoring America's Gaming Greats

September 18, 2002, Las Vegas

The AGA will sponsor a dinner benefiting the NCRG at Paris Las Vegas hotel-casino during the week of Global Gaming Expo, Sept. 17-19, 2002. The evening gala will honor industry leaders in business, entertainment and responsible gaming, and all proceeds will benefit the NCRG.

FINANCIAL STATEMENTS (UNAUDITED)

Jan. 1, 2001 - Dec. 31, 2001

ASSETS

Current Assets

Checking/Savings	\$1,099,800.74
Accounts Receivable	6,425.00
Total Current Assets	<u>1,106,225.74</u>

Other Assets

Grants Receivable*	
2000	10,000.00
2001	130,000.00
2002	955,000.00
Beyond 2002	425,000.00
Unamortized Discount	(38,149.00)
Uncollectible Estimate	(200,000.00)
Total Pledges Receivable	<u>1,281,851.00</u>
Total Other Assets	<u>1,281,851.00</u>

TOTAL ASSETS \$2,388,076.74

LIABILITIES & EQUITY

Liabilities

Current Liabilities	
Accounts Payable	\$25,493.21
Other Current Liabilities	
Accrued Vacation	2,533.75
Grant Payable - Harvard 2001	693,661.00
Grant Payable - Harvard 2002	1,100,000.00
Research Grants Payable**	308,657.00
Total Other Current Liabilities	<u>2,104,851.75</u>

Total Current Liabilities 2,130,344.96

Total Liabilities

Equity

Retained Earnings	368,577.52
Net Income	(110,845.74)
Total Equity	<u>257,731.78</u>

TOTAL LIABILITIES & EQUITY \$2,388,076.74

*Grants pledged to the NCRG. Receivables are to be collected over the next four years.

**Research grants are payable over multiple years based upon the research program term.



back of financial



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RESPONSIBLE GAMING

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