




NATIONAL CENTER FOR RESPONSIBLE GAMING



ANNUAL REPORT 2000



inside front cover

Pictured on the cover: The NCRG's annual conference, "The Comorbidity of Pathological Gambling: A Current Research Synthesis," held Dec. 3-5, 2000, at the MGM Grand Hotel/Casino in Las Vegas, Nev. From top to bottom:

Maj. Gen. Paul A. Harvey (Ret.) has served as chairman of the National Center for Responsible Gaming (NCRG) board of directors since 1996.

William S. Boyd is chairman and CEO of Boyd Gaming Corporation, the NCRG's founding donor, and president of the NCRG board of directors.

Howard J. Shaffer, Ph.D., C.A.S., director of the Division on Addictions at Harvard Medical School (HMS), is a member of the NCRG board of directors and principal investigator of the Institute for Research on Pathological Gambling and Related Disorders at HMS.

Linda B. Cottler, Ph.D., is professor of epidemiology in psychiatry at Washington University School of Medicine in St. Louis, Mo. A current member of the program advisory board for the Institute for Research on Pathological Gambling and Related Disorders at the HMS Division on Addictions, she chaired the NCRG's conference, "The Comorbidity of Pathological Gambling: A Current Research Synthesis," in 2000.

Photo courtesy: Las Vegas Sun.



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 FROM THE CHAIRMAN



Just as the year 2000 marked the beginning of a new century, it also represented a landmark year for the National Center for

Responsible Gaming (NCRG). Founded in 1996, the NCRG has made great strides over the past five years toward the goal of helping individuals affected by gambling disorders through high quality research and public education efforts. To this end, 2000 was indeed a pivotal year.

Most noteworthy, perhaps, was the NCRG's awarding of a contract to Harvard Medical School's Division on Addictions to establish the Institute for Research on Pathological Gambling and Related Disorders. Modeled after the National Institutes of Health, the new institute will support both internal core gambling research — the pioneering work of Dr. Howard Shaffer — and competitively funded external research at non-Harvard research institutions. We are very proud that the research program established by the NCRG will be carried on by the world's pre-eminent medical research institution. Because the NCRG has provided support to the institute to perform some of the academic and scientific functions previously performed by the center, the NCRG is now free to focus more resources on expanding public education and awareness programs, especially in the area of youth gambling.

In the year 2000, the NCRG also awarded more than \$500,000 in support of projects investigating the neurobiology of pathological gambling. Since its founding, the NCRG has awarded \$3.7 million to leading research institutions in the United States and Canada. During this year, many of the NCRG-funded investigators published their

findings in the most prestigious academic journals. Dissemination of research also was achieved through the NCRG's second annual conference, titled "The Comorbidity of Pathological Gambling: A Current Research Synthesis." The conference featured nationally recognized scientists in the field of addictions in dialogue with researchers, counselors, gaming industry employees and government officials. The program addressed one of the most challenging issues in the study of gambling disorders: why so many pathological gamblers also suffer from other mental health problems such as substance abuse and depression. The enthusiastic response of the 175 conference registrants encouraged us to continue sponsoring an annual conference.

As the NCRG enters its sixth year, I want to take this opportunity to thank all of the center's contributors — new and old. Without their generosity and commitment to being responsible corporate citizens, the essential research and education programs of the NCRG would not be possible. We look forward to your continued involvement in the coming years.

We are looking forward to an exciting year in 2001. The opportunity to work with the Harvard institute and to expand our education and public awareness efforts holds the promise of genuine progress toward understanding and combating pathological gambling.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul A. Harvey". The signature is written in a cursive style with a long, sweeping tail that extends to the right.

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

MILESTONES

1996-2000 NATIONAL CENTER FOR RESPONSIBLE GAMING

1996

- The American Gaming Association (AGA) establishes the National Center for Responsible Gaming (NCRG), the first organization devoted exclusively to funding independent, peer-reviewed research on pathological and youth gambling.
- The commercial casino industry and related manufacturers and vendors pledge \$4.5 million to the NCRG — an unprecedented level of support for gambling research.
- NCRG awards its first grant to Harvard Medical School for “Estimating the Prevalence of Disordered Gambling in the U.S. and Canada: A Meta-analysis.”



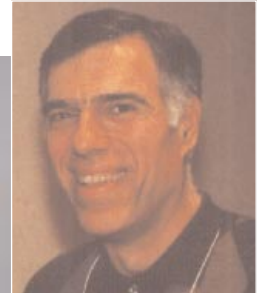
1996: The American Gaming Association announced the establishment of the NCRG at a press conference in Kansas City, Mo.

1997

- The NCRG opens its offices at the University of Missouri-Kansas City.
- The NCRG awards \$1.3 million in grants for research on problem gambling.
- Harvard Medical School releases the results of the NCRG-funded meta-analysis providing the first reliable statistics on the rate of gambling disorders in the United States and Canada.



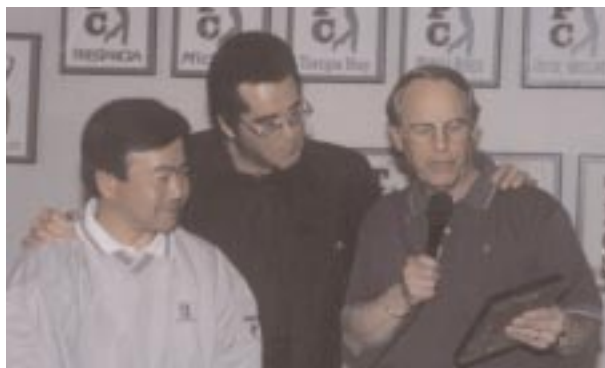
1997: Suck Won Kim, M.D., University of Minnesota, received one of NCRG's first neuroscience grants for a clinical trial of naltrexone.



1997: Howard J. Shaffer, Ph.D., C.A.S., co-author of the Harvard study on prevalence released in 1997.

1998

- Representatives from the NCRG testify at hearings conducted by the National Gambling Impact Study Commission.
- JCM American Corporation and the AGA cosponsor the inaugural golf tournament for the benefiting the NCRG.
- Dr. Howard J. Shaffer, Ph.D., C.A.S., of Harvard Medical School's Division on Addictions conducts the first of many workshops on problem gambling for gaming industry personnel.



1998: Akiyoshi Isoi, president of JCM American Corporation, entertainer Wayne Newton and Frank J. Fahrenkopf, Jr., president of the American Gaming Association and member of the NCRG board, at the 1998 golf tournament.



1999: Alan Leshner, Ph.D., director of the National Institute on Drug Abuse, the keynoter at the NCRG's first conference.

1999: Stephen Joel Trachtenberg, Ph.D., president of The George Washington University, welcomed NCRG conference participants to GW's campus.



1999: Richard Evans, Ph.D., University of Houston (left), and Barry Kosofsky, M.D., Ph.D., Massachusetts General Hospital, chaired the 1999 peer-review panel for the NCRG.



2000: Phil Satre, chairman and CEO of Harrah's Entertainment, Inc., and an NCRG board member, accepts the special achievement award for responsible gaming from Frank J. Fahrenkopf, Jr., at the 2000 Gaming Hall of Fame Dinner.

1999

- Alan Leshner, Ph.D., director of the National Institute on Drug Abuse, delivers the keynote address, "Addiction is a Brain Disease—and It Matters," at NCRG's first annual conference, "New Directions in Gambling Addiction Research," cosponsored by The George Washington University, Washington, D.C.
- NCRG awards more than \$1 million in research grants for a variety of investigations, including several focused on youth gambling.
- Donors renew support for NCRG, bringing total commitments to \$7 million.
- The National Research Council of the National Academy of Sciences publishes its report praising Harvard's estimates of the rate of problem gambling as the most reliable to date.

2000

- The NCRG awards a contract to establish the Institute for Research on Pathological Gambling and Related Disorders at Harvard Medical School's Division on Addictions.
- The NCRG's annual conference, "The Comorbidity of Pathological Gambling: A Current Research Synthesis," continues the dialogue on co-occurring disorders initiated by the National Research Council.
- Harrah's Entertainment, Inc., a major NCRG donor, is honored for its commitment to responsible gaming with a special achievement award at the Gaming Hall of Fame Dinner.

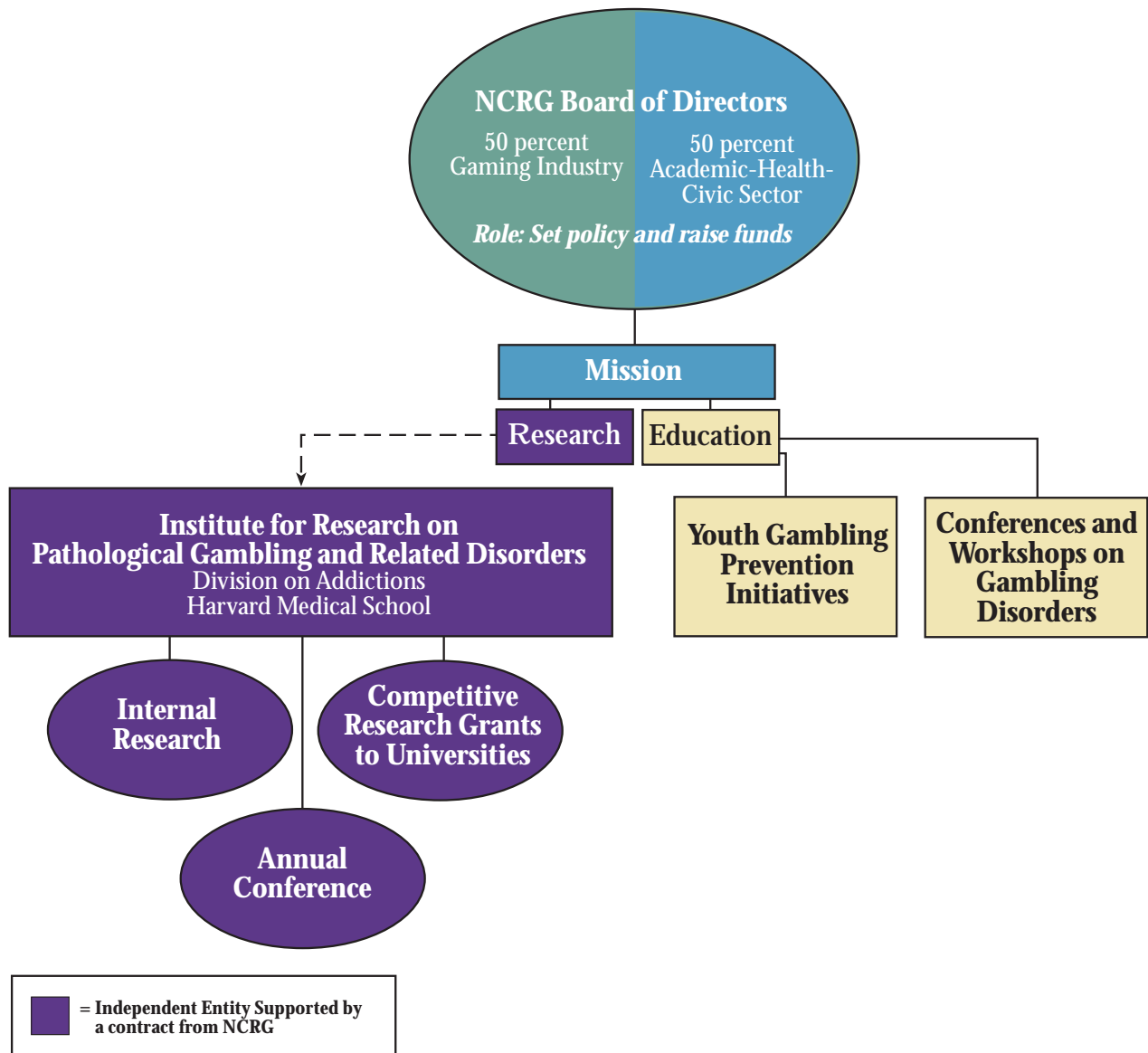


2000: Speakers and participants at NCRG's annual conference: (far left) Jeffrey L. Derevensky, Ph.D.; (above, from left) Mark Appelbaum, Ph.D., Francisco Napolitano, J.D., Ph.D., and David Korn, M.D.

Photo courtesy: Las Vegas Sun



NCRG ORGANIZATION AND PROGRAMS



For more information on gambling research and the annual conference, contact:
 Christine Reilly, Executive Director
 Institute for Research on Pathological Gambling and Related Disorders, Division on Addictions, Harvard Medical School
 180 Longwood Avenue, Suite 330
 Boston, MA 02115
 Tel: 617-432-0297
 Fax: 617-432-0057
 Email: Christine_Reilly@hms.harvard.edu
 www.hms.harvard.edu/doa

For more information on the NCRG's educational programs, contact:
 Aleasha Herdina, Acting Executive Director
 National Center for Responsible Gaming
 P.O. Box 25366
 Kansas City, MO 64119-0666
 Tel: 816-453-9964
 Fax: 816-452-1849
 Email: contact@ncrg.org
 www.ncrg.org

NCRG BOARD OF DIRECTORS

The National Center for Responsible Gaming is a tax-exempt, nonprofit organization founded in 1996 to address problem gambling 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 served on the board of directors in the year 2000:

Officers:

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

President
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:

Robert Boswell

Senior Vice President
Pioneer Behavioral Health

Thomas J. Brosig

Senior Vice President of Administration
Park Place Entertainment Corporation

Roland W. Burris

Of Counsel
Buford & Peters, LLC

Sue Cox

Executive Director
Texas Council on Problem and Compulsive
Gambling

Joyce Elaine Conseen Dugan

Former Principal Chief
Eastern Band of the Cherokee Nation

Frank J. Fahrenkopf, Jr.

President and CEO
American Gaming Association

Alan Feldman

Vice President of Public Affairs
MGM MIRAGE™

Frank Fertitta III

President and CEO
Station Casinos, Inc.

John M. Gallaway

President and COO
Isle of Capri Casinos, Inc.

David A. Korn, M.D.

Assistant Professor of Public Health
University of Toronto

Alfred C. Lomax

Airport Police Chief
Kansas City International Airport

Phillip Martin

Tribal Chief
Mississippi Band of Choctaw Indians

Brian McKay

Of Counsel
Lionel Sawyer & Collins

Carol O'Hare

Executive Director
Nevada Council on Problem
Gambling

James 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.,
C.A.S.**

Director, Division on Addictions
Harvard Medical School

Pauline Yoshihashi

Senior Vice President
Abernathy, MacGregor & Frank

Staff:

Aleasha T. Herdina

Acting Executive Director

CONTRIBUTORS

The National Center for Responsible Gaming (NCRG) has received pledges or grants totaling more than \$7 million from 1997 through 2006. In 2000, the NCRG welcomed new contributors Isle of Capri Casinos, Inc., the Mississippi Band of Choctaw Indians, Argosy Gaming Company and Sandia Casino.

FOUNDING CONTRIBUTOR

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

CONTRIBUTORS 1997-2002

\$1,350,000*

Park Place Entertainment Corporation

\$600,000

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

\$560,000**

Harrah's Entertainment, Inc.

\$300,000

Aztar Corporation

\$100,000-\$299,000

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

**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 Suite Hotel and Casino and Showboat, Inc., which were acquired by Harrah's Entertainment, Inc., in 1998.*

\$50,000-\$99,000

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

\$10,000-\$49,000

Foxwoods Resort Casino
Harveys Casino Resorts
JCM American Corporation
Mission Industries
Mohegan Sun
Sandia Casino
Southern Wine and Spirits of Nevada

2000 JCM/AGA GAMING GOLF CLASSIC

The JCM American Corporation and the American Gaming Association sponsored a charity golf tournament on May 5, 2000, to benefit the National Center for Responsible Gaming (NCRG). Held at the TPC at the Canyons in Las Vegas, the tournament and auction, conducted by entertainer Clint Holmes, raised more than \$30,000 for the NCRG.

Sponsors

American Gaming and Electronics
Anchor Gaming
Bally Gaming Systems
Bally's Las Vegas
Boyd Gaming Corporation
Citibank
Coca-Cola Bottling Corporation
Cole Industries
Dolphin Court Salon and Day Spa
Eagle Promotions
Ernst & Young LLP
Golf Augusta Pro Shops
Hamada of Japan
Harrah's Entertainment, Inc.
Hi Tech Gaming
Ho Ho Ho Chinese Gourmet
IC Group
International Game Technology
Japanese Seafood
Gourmet Ocean Forest

Martin-Harris Construction
MGM Grand, Inc.
Mirage Resorts, Inc.
Nevada Bob's
Osaka Japanese Restaurant
Palace Station
Quest Partners
Regent Las Vegas
Ruth's Chris Steak House
Sankyo USA Corp
Shuffle Master Gaming, Inc.
Sigma Game, Inc.
Southern Wine and Spirits of Nevada
Station Casinos, Inc.
Staz's Nevada Indian
Texas Station Casino
The Regent Las Vegas
The Whole Bean
TPC at the Canyons
Vegas Cabinets
Viejas Business Enterprises
Whole Grain Natural Bread Company
Williams Gaming, Inc.

2000 GAMING HALL OF FAME CHARITY DINNER AND INDUCTION CEREMONY

In October 2000, the American Gaming Association (AGA) and *International Gaming and Waging Business* sponsored a fund-raising dinner at the Mandalay Bay in Las Vegas benefiting the National Center for Responsible Gaming (NCRG) and SafeNest, a Las Vegas-based organization that provides temporary assistance to victims of domestic violence. Attended by 700 guests, the dinner honored the 2000 inductees into the Gaming Hall of Fame, J. Terrence Lanni, chairman of MGM MIRAGE™, and entertainer Wayne Newton. This year's dinner was also the first time the Gaming Hall of Fame has bestowed special achievement awards. Industry trailblazer Del Webb was honored posthumously with a special achievement award for innovation, and Harrah's Entertainment, Inc., was recognized for its pioneering programs in responsible gaming. In accepting the award, Phil Satre, chairman and CEO of Harrah's Entertainment, Inc., and a founding board member of the NCRG, announced the Harrah's Code of Commitment, a pledge to not only codify the company's existing responsible gaming policies and practices but also "our pledge to be publicly accountable for our actions — to accept the reality that our reputation is on the line if we don't fulfill the promises we make."

The following companies and individuals generously supported the 2000 dinner.



The 2000 inductees: Terry Lanni, chairman of MGM MIRAGE™, and entertainer Wayne Newton (top).

"Michael Flatley's Lord of the Dance" (lower left) and "Hoops" from Cirque du Soleil (lower right) entertained the guests at the awards dinner.

\$25,500

MGM MIRAGE™

\$7,000

Boyd Gaming Corporation
Isle of Capri Casinos, Inc.

\$6,000

Harrah's Entertainment, Inc.

\$4,000 - \$4,500

Bank of America
The Friedmutter Group
Hotel Employees and Restaurant Employees International Union
Park Place Entertainment Corporation
Claudine Williams
Willis

\$3,000

Action Online
Argosy Gaming Company
Café Milano
CIBC World Markets
Coast Hotels and Casinos
Coca-Cola Fountain
Cohn & Wolfe

Cooper Perskie April
Niedelman Wagenheim & Levenson, P.A.

Culinary Workers Union
Del Webb Corporation
Foxwoods Resort Casino
GEM Communications
Harveys Casino Resorts
Horseshoe Gaming Holding Corporation

Houssels Family Foundation
Hyatt Gaming Services
International Game Technology

JCM American Corporation
Jefferies & Company, Inc.
Konami Gaming
Las Vegas Convention and Visitors Authority

The Lincy Foundation
Lionel Sawyer & Collins
Mandalay Resort Group
The Marnell Foundation
Mikohn Gaming
Mission Industries
Next Generation Entertainment

Reed Exhibition Companies
Silverton Hotel & Casino
Southwest Gas Corporation
Spintek Gaming Technologies, Inc.
Station Casinos, Inc.
Sunrise Hospital
Tropicana Resort & Casino
Wells Fargo
Williams Gaming, Inc.
Young Electric Sign Company (YESCO)

\$1,000+

Arthur Andersen
Fertitta Enterprises, Inc.
Hard Rock Hotel & Casino
Home Gambling Network
Keefer, O'Reilly & Ferrario
Marshall Management
Nevada Title Company
Paradise Homes
Pro Serve Training
Sprint
Wayne Newton

In-kind Sponsors

American Gaming Association
Aureole
Michael Berk
Boyd Gaming Corporation
China Grill
Cirque du Soleil
GEM Communications
Goetz Printing Corporation, Springfield, Va.
Lupo
Mandalay Resort Group
MGM MIRAGE™
"Michael Flatley's Lord of the Dance"
Nevada Color Litho
Sandy Peltyn
Southern Wine and Spirits of Nevada

THE INSTITUTE FOR RESEARCH ON PATHOLOGICAL GAMBLING AND RELATED DISORDERS, HARVARD MEDICAL SCHOOL'S DIVISION ON ADDICTIONS

A MILESTONE IN GAMBLING RESEARCH

In the year 2000, the National Center for Responsible Gaming (NCRG) embarked upon a historic collaboration with Harvard Medical School (HMS) when it awarded a \$2.6 million contract to the HMS Division on Addictions to establish the Institute for Research on Pathological Gambling and Related Disorders. By launching the Institute at one of the world's preeminent institutions in medical research and education, the NCRG is one step closer to its goal of understanding pathological gambling so that effective prevention and treatment programs can be developed.

Organizationally modeled on the National Institutes of Health, the Institute will support both internal core gambling research and competitively funded external research at educational, medical and research institutions worldwide. The intramural research program will carry on the pioneering work of Dr. Howard Shaffer, director of the HMS Division on Addictions. In 1997, Shaffer and his colleagues released the first comprehensive meta-analysis of disordered gambling prevalence rates in the United States and Canada. Published in the *American Journal of Public Health* in 1999, this analysis yielded the most reliable estimates, to date, of the rate of problem gambling in the general adult population and special populations such as youth. Praised by the National Research Council of the National Academy of Sciences, this frequently cited study has had a profound impact on the field.

Since then, Harvard has continued to exert a leadership role in the gambling field by integrating current and emerging prevalence studies into the database created for the meta-analysis. As the largest such compilation, this dynamic database has proven to be an invaluable resource for researchers. The Harvard team has produced numerous technical reports on prevalence and other aspects of gambling research that have

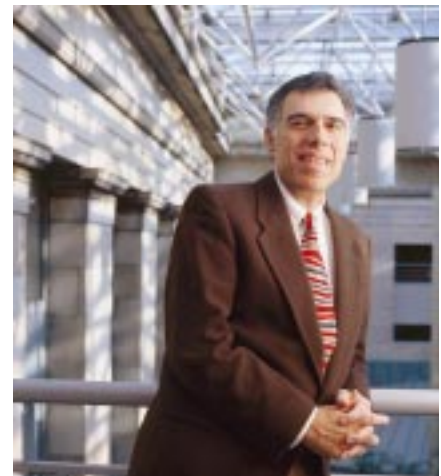


Photo courtesy: Richard Howard

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.

“The best current estimates of pathological and problem gambling among the general adult U.S. population and selected subpopulations can be found in the studies included in the meta-analysis conducted by the research team at Harvard Medical School, Division on Addictions.”

National Research Council. (1999), Pathological Gambling: A Critical Review, 98.

“David Korn and Howard Shaffer have made a remarkable contribution. Their review of the growth of gambling behaviour, synthesis of alternative viewpoints and agenda for action is both profound and practical. Upon reading this monograph, one is left with a deep understanding of how we can achieve the right balance.”

Skinner, Harvey A. (1999). *Gambling: Achieving the Right Balance*. *Journal of Gambling Studies*, 15, 286.

been or are scheduled to be published in academic journals such as the *American Journal of Industrial Medicine*, *American Journal of Public Health*, *The Canadian Journal of Public Health*, *The Behavioral Measurement Letter*, *Addictive Behaviors*, *American Journal of Orthopsychiatry*, *Journal of Substance Abuse Treatment*, *Journal of Gambling Studies* and *Annual Review of Public Health*.

Encouraging a fresh perspective on gambling is a hallmark of this research. For example, in the monograph “Gambling and the Health of the Public: Adopting a Public Health Perspective,” David Korn and Howard Shaffer advocated the adoption of a public health framework for understanding gambling, “By understanding gambling and its potential impacts on the public’s health, policy-makers and health practitioners can minimize gambling’s negative impacts and appreciate its potential benefits.” Harvey A. Skinner, Ph.D., chair of the department of public health sciences at the University of Toronto, praised this monograph as “a landmark in the gambling field.”

The Institute’s current intramural research program will expand Shaffer’s innovative research on the health risks faced by gaming employees. Shaffer’s research provides a portal to understanding how people adapt to gambling exposure on a daily basis. In addition, it provides the opportunity to understand how people might transition in and out of gambling disorders, develop “immunity” and move toward healthier states.

Because gambling research is an emerging field, it is vital to develop a cadre of scientists focused on gambling disorders. That is precisely why the NCRG has provided support to the Institute to conduct an independent competitive research grants program open to investigators from non-Harvard institutions. Continuing NCRG’s commitment to the highest scientific merit, the Institute will employ scientific peer-review panels to evaluate research proposals according to criteria reflecting the stringent standards of the National Institutes of Health.

Disseminating gambling research is also a top priority for the Institute. In addition to cosponsoring an annual scientific conference with the NCRG, the Institute helps support *The WAGER*, a weekly research bulletin, now available on the Internet at www.thewager.org. Although advances in information technology have greatly increased the quantity and accessibility of gambling-related resources, the majority of research materials remain cloistered in university libraries and laboratories. Since its inception, the mission of *The WAGER* has been to gather, distill and share these resources, providing readers with a direct pipeline to the latest information on pathological gambling. Now in its sixth year of continuous operation, *The WAGER*, which has a worldwide weekly circulation of more than 12,000, has become the premiere Internet site for information on gambling-related research.



Richard I. Evans, Ph.D., University of Houston, was recently appointed to the Program Advisory Board of the Institute for Pathological Gambling and Related Disorders.

PROGRAM ADVISORY BOARD MEMBERSHIP*

The Program Advisory Board is composed of distinguished academic researchers whose role is to counsel the staff of the Institute for Research on Pathological Gambling and Related Disorders at Harvard Medical School's Division on Addictions on funding priorities for the extramural grants program and ensure a rigorous peer review of proposals.

**Preliminary membership as of March 19, 2001*

Barry Kosofsky, M.D., Ph.D., Chair

Associate Neurologist
Massachusetts General Hospital
Associate Professor of Neurology
Harvard Medical School

Mark Appelbaum, Ph.D.

Professor of Psychology
University of California, San Diego

Linda B. Cottler, Ph.D.

Professor of Epidemiology in Psychiatry
Washington University School of
Medicine

Joseph T. Coyle, M.D.

Eben S. Draper Professor of Psychiatry
Harvard Medical School

Jeffrey L. Derevensky, Ph.D.

Professor of Applied and Child
Psychology
Associate Professor of Psychiatry
McGill University

Richard I. Evans, Ph.D.

Distinguished University Professor of
Psychology
University of Houston

Robert Ladouceur, Ph.D.

Professor of Psychology
Université Laval

Richard McGowan, S.J., D.B.A.

Associate Professor of Economics
Boston College
Visiting Associate Professor
Division on Addictions
Harvard Medical School

Lisa M. Najavits, Ph.D.

Director, Trauma Research Program
Alcohol and Drug Abuse Program
McLean Hospital
Associate Professor of Psychiatry
Harvard Medical School

Peter E. Nathan, Ph.D.

University of Iowa Foundation
Professor of Psychology
University of Iowa

Ken C. Winters, Ph.D.

Associate Professor of Psychiatry
Director, Center for Adolescent
Substance Abuse Research
University of Minnesota

Harold Wynne, Ph.D.

Wynne Resources, Ltd.

Visit www.hms.harvard.edu/doa/ for updates on the work of the Institute for Research on Pathological Gambling and Related Disorders at Harvard Medical School's Division on Addictions.

GRANT AWARDS

NCRG FUNDS NEW RESEARCH IN 2000

The National Center for Responsible Gaming (NCRG) was created in 1996 to support and promote new and rigorous scientific research on pathological gambling and youth gambling. The NCRG has established a highly competitive and widely respected grants program that, over the past five years, has awarded \$3.7 million to leading research institutions in the United States and Canada.

NCRG-funded research has spanned all of the critical domains for investigating gambling disorders: epidemiology, behavioral and social science and neuroscience. The request for applications in 2000 focused on investigations of the neurobiology of pathological gambling. The NCRG awarded more than \$500,000 in support of the following cutting-edge research projects in 2000.

A Family-Genetic Study of Pathological Gambling

Principal Investigator: Donald W. Black, M.D.

Professor of Psychiatry
University of Iowa

Award: \$169,929

Completion Date: August 31, 2002

The goal of this project is to explore the familial nature of pathological gambling through a blind and controlled family study involving interviews with 30 subjects who fulfill diagnostic criteria for pathological gambling, according to the DSM-IV™ and their first-degree relatives. Because pathological gambling is often considered a variant of mood disorders, substance use disorders, impulse control disorders as well as part of an obsessive-compulsive spectrum, the investigators will be particularly interested in assessing relatives for these conditions. These findings should add to the understanding of the etiology, pathophysiology and classification of pathological gambling. Future studies will include collecting blood samples for DNA from genetically informative families for study in linkage and association studies.

Functional MRI of Prefrontal Cortex Function in Pathological Gamblers

Principal Investigator: Vincent P. Clark, Ph.D.

Assistant Professor of Psychiatry
University of Connecticut Health Center

Award: \$172,056

Completion Date: August 31, 2002

The primary objective of this study is to compare brain function between healthy non-gamblers and heavy gamblers using functional magnetic resonance imaging (fMRI). The principal investigator will examine brain activity dur-

ing a risk-taking task to determine if altered brain function is observed in heavy gamblers. Brain activity evoked by a risk-taking task will be compared with activity evoked by the three-stimulus oddball task to examine specificity of differences in brain function of heavy gamblers to risk taking. The project will use recently developed methods for enhancing fMRI signal from orbitofrontal cortex and VMPFC to provide uniform spatial sensitivity, resulting in increased activation detectability in these regions.

Naltrexone and Citalopram Treatment of Pathological Gambling and Co-morbid Alcohol Abuse or Dependence

Principal Investigator: Marc N. Potenza, M.D., Ph.D.

Assistant Professor of Psychiatry
Yale School of Medicine

Award: \$172,500

Completion Date: August 31, 2002

The purpose of this project is to perform a pilot study of the short-term tolerability and efficacy of citalopram, naltrexone and a citalopram/naltrexone combination pharmacotherapy in the treatment of dually diagnosed patients with pathological gambling and alcohol abuse or dependence. Naltrexone, an opioid antagonist, has been found to significantly reduce the amount of alcohol consumed and increase abstinence rates in alcohol-dependent patients. Citalopram, an SSRI recently approved in the United States, has been reported to have the potential for fewer drug-drug interactions, a feature beneficial in a population with substance use disorders and viable for combination pharmacotherapy. The goal of this trial is to provide the foundation for a large-scale pharmacotherapy study of similar design.



Barry Kosofsky, M.D., Ph.D., Massachusetts General Hospital, has chaired the NCRG's neuroscience peer-review panel since 1997.

NEUROSCIENCE PEER-REVIEW PANEL

Proposals for the neuroscience research grants awarded in 2000 were evaluated by the following panel.

CHAIRMAN:

Barry Kosofsky, M.D., Ph.D.

Associate Neurologist
Massachusetts General Hospital
Associate Professor of Neurology
Harvard Medical School

Mark Appelbaum, Ph.D.

Professor of Psychology
University of California, San Diego

Michael Bozarth, Ph.D.

Associate Professor of Psychology
(Behavioral Neuroscience)
State University of New York-Buffalo

Hans Breiter, M.D.

Director
Motivation and Emotion Neuroscience
Center
Massachusetts General Hospital
Assistant Professor of Psychiatry
Harvard Medical School

Joseph F. Cubells, Jr., M.D.

Assistant Professor of Psychiatry
Yale University School of Medicine

Richard LaBrie, Ed.D.

Deputy Director
National Technical Center for
Substance Abuse Needs Assessment

David Self, Ph.D.

Assistant Professor of Psychiatry
University of Texas Southwestern
Medical Center

Robert Sutherland, Ph.D.

Professor of Psychology & Psychiatry
University of New Mexico

NCRG ADVISORY BOARD 2000

The evaluations of proposals by the peer-review panel are reported to the NCRG's advisory board, an independent body of academic researchers and other mental health experts that is responsible for establishing the NCRG's research priorities, selecting proposals for funding and conference planning.

Robert Boswell, Chairman

Senior Vice President
Pioneer Behavioral Health

Mark Appelbaum, Ph.D.

Professor of Psychology
University of California, San Diego

Hans Breiter, M.D.

Director
Motivation and Emotion Neuroscience
Center
Massachusetts General Hospital
Assistant Professor of Psychiatry
Harvard Medical School

Linda B. Cottler, Ph.D.

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Washington University School of
Medicine

William Eadington, Ph.D.

Professor of Economics
Director
Institute for the Study of Gambling and
Commercial Gaming
University of Nevada, Reno

Richard L. Evans, Ph.D.

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Psychology
University of Houston

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North American Training Institute

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University of Minnesota Medical School

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Division of Psychopharmacology
The Scripps Research Institute

Barry Kosofsky, M.D., Ph.D.

Associate Neurologist
Massachusetts General Hospital
Associate Professor of Neurology
Harvard Medical School

Eileen Luna, J.D., M.P.A.

Assistant Professor of American Indian
Studies
University of Arizona, Tucson

Lisa Najavits, Ph.D.

Director
Trauma Research Program
Alcohol and Drug Abuse Program
McLean Hospital
Associate Professor of Psychiatry
Harvard Medical School

Francisco Napolitano, Esq., Ph.D.

Attorney at Law

Peter E. Nathan, Ph.D.

University of Iowa Foundation
Professor of Psychology
University of Iowa

David Self, Ph.D.

Assistant Professor of Psychiatry
University of Texas Southwestern
Medical Center

For a complete listing of research projects supported by the NCRG, visit www.ncrg.org and click on "NCRG-Funded Research."

"The brain has emerged as the central focus for studies of mental health and mental illness. New scientific disciplines, technologies, and insights have begun to weave a seamless picture of the way in which the brain mediates the influence of biological, psychological, and social factors on human thought, behavior, and emotion in health and in illness."

U.S. Department of Health and Human Services. (1999). Mental Health: A Report of the Surgeon General—Executive Summary. Rockville, Md.: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.

MAKING CONNECTIONS

NCRG OUTREACH

The education dimension of the mission of the National Center for Responsible Gaming (NCRG) is fulfilled through a variety of programs and media, from conferences to academic journals. The goals of these activities are to foster public awareness of problem 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: “The Comorbidity of Pathological Gambling: A Current Research Synthesis”

The NCRG’s annual conference was held Dec. 3-5, 2000, at the MGM Grand Hotel/Casino in Las Vegas. The conference expanded on the dialogue initiated by the National Research Council of the National Academy of Sciences on the challenges facing gambling researchers. The National Research Council’s 1999 report observed that “the co-occurrence of other disorders with pathological gambling may be one of the most important and influential indicators of the pathways into and out of pathological gambling.”

The NCRG brought together the leading scientists in the addictions field to share the latest research on comorbidity and to exchange ideas with an unusually diverse audience for an academic meeting: academics, clinicians, gaming regulators, state health department officials and gaming industry executives. Praised by the participants as an “illuminating review,” the conference program offered a variety of perspectives from which to examine the comorbidity issue—neuroscience, epidemiology, treatment, public policy and prevention. One participant noted that, “Unlike some other conferences, there were no ‘forbidden’ topics or sacred cows.”

“The conference was stimulating and thought provoking and allowed dialogue and ideas to be freely expressed. The presenters were experts in their fields and each provided something special to the program format. The topics were relevant and focused on issues our society faces daily.”

Evaluation of conference by participant.

“The conference confirmed and solidified the direction of my current research on gambling. In this context this was the best conference this year—nice work!”

Evaluation of conference by participant.

Public Presentations

Board members, staff and investigators representing the NCRG participated in the following programs and hearings in 2000:

American Academy of Addiction Psychiatry

American Association for Geriatric Psychiatry

American Psychological Association
Illinois Gaming Board

Indiana Gambling Awareness Week
International Conference on Gambling and Risk-taking

Missouri Gaming Commission
National Conference on Problem Gambling

National Think Tank on State-Funded Gambling Treatment Programs:
A Massachusetts Initiative

“Responsible Gaming: Keeping It Fun”
broadcast during Responsible Gaming Week, sponsored by the American Gaming Association

Symposium on Problem and Pathological Gambling: A Look at the Issues of Mental Health, Center for Mental Health Services, SAMHSA

U.S. Senate Committee on Commerce, Science and Transportation

NCRG Research in the Scientific Literature

Results of NCRG-funded research are disseminated widely throughout the scientific community by publication in leading peer-reviewed academic journals.

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- Comings, D.E. (2000). The molecular genetics of ADHD and conduct disorder: relevance to the treatment of recidivistic antisocial behavior. In D. Fishbein (Ed.), *Prevention of Antisocial Behavior*. New York: Civic Research.
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- Comings, D.E. et al. (1999). Studies of the 48 bp repeat polymorphism of the DRD4 gene in impulsive, compulsive, addictive behaviors: Tourette Syndrome, ADHD, pathological gambling and substance abuse. *American Journal of Medical Genetics (Neuropsychiatric Genetics)*, 88, 358-368.
- Comings, D.E. et al. (1999). Potential role of the estrogen receptor gene (ESR1) in anxiety. *Molecular Psychiatry*, 4, 374-7.
- Comings, D.E. et al. (1999). Association of Enkephalinase gene with low amplitude P300 waves. *Neuroreport*, 10, 2283-2285.
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- Eber, G. B. & Shaffer, H.J. (2000). Trends in bio-behavioral gambling studies research: quantifying citations. *Journal of Gambling Studies*, 16, 461-467.
- Hodgins, D.C. (2001). Processes of changing gambling behavior. *Addictive Behaviors*, 26, 121-128.
- Hodgins, D.C., Currie, S.R. & El-Guebaly, N. (2001). Motivational enhancement and self-help treatments for problem gambling. *Journal of Consulting and Clinical Psychology*, 69, 50-57.
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- Kim, S.W. (in press). Double-blind naltrexone and placebo comparison study in the treatment of pathological gambling. *Biological Psychiatry*.
- Korn, D.A. & Shaffer, H.J. (1999). Gambling and the health of the public: Adopting a public health perspective. *Journal of Gambling Studies*, 15, 289-365.
- Ladouceur, R., Sylvain, C., Letarte, H., Giroux I. & Jacques, C. (1998). Cognitive treatment of pathological gamblers. *Behavioral Research and Therapy*, 36, 1111-9.
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- Shaffer, H.J. (1999). On the nature and meaning of addiction. *National Forum: The Phi Kappa Phi Journal*, 79, 9-14.
- Shaffer, H.J. & Korn, D.A. (in press). Prevalence of Gambling and Related Psychiatric Disorders. *Annual Review of Public Health*.
- Shaffer, H.J. (1999). Strange bedfellows: A critical view of pathological gambling and addiction. *Addiction*, 94, 1445-1448.
- Shaffer, H.J., Eber, G.B., Hall, M.N. & Vander Bilt, J. (2000). Smoking behavior among casino employees: Self-report validation using plasma cotinine. *Addictive Behaviors*, 25, 693-704.
- Shaffer, H.J., Forman, D.P., Scanlan, K.M. & Smith, F. (2000). Awareness of gambling-related problems, policies and educational programs among high school and college administrators. *Journal of Gambling Studies*, 16, 93-101.
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- Winters, K.C. & Anderson, N. (2000). Gambling involvement and drug use among adolescents. *Journal of Gambling Studies*, 16, 175-198.
- Winters, K.C., Stinchfield, R.D., Botzet, A. & Anderson, N. (in press). A prospective study of youth gambling. *Psychology of Addictive Behaviors*.
- Wu, S. & Comings, D.E. (1999). A common C-1018G polymorphism in the human 5-HT1A receptor gene. *Psychiatric Genetics*, 9, 106-106.

ON THE HORIZON... 2001 AND BEYOND

YOUTH INITIATIVES

2nd International Think Tank on Youth Gambling as a Social and Public Health Issue May 4-6, 2001

The National Center for Responsible Gaming (NCRG) is a proud sponsor of the 2nd International Think Tank on Youth Gambling as a Social and Public Issue to be held May 4-6, 2001. The Think Tank, which will build on the recommendations of the North American Think Tank on Youth Gambling Issues held at Harvard Medical School in 1995, will develop an international public health agenda focused on minimizing the negative impact of gambling on youth. Participants will include key researchers, practitioners, educators, industry representatives, youth workers and policy-makers from around the world. The Think Tank will be hosted by the International Centre for the Study, Treatment and Prevention of Youth Gambling Problems at McGill University and the Institute for Research on Pathological Gambling and Related Disorders at Harvard Medical School's Division on Addictions.

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. It aims at improving students' critical thinking ability, number sense and knowledge of the mathematics of gambling so they can develop rational views about gambling and make informed choices. The curriculum will be available to educators free of charge on the NCRG Web site, www.ncrg.org.

RESEARCH

The Institute for Research on Pathological Gambling and Related Disorders, which will administer all future grants and research programs through a contract with the NCRG, will release a request for applications for behavioral and social science investigations of gambling disorders in the spring of 2001. For more information, visit www.hms.harvard.edu/doa.

EDUCATION

Annual Conference

Dec. 2-4, 2001

The NCRG and the Institute for Research on Pathological Gambling and Related Disorders will hold the annual conference on gambling research Dec. 2-4, 2001, in Las Vegas. Visit www.hms.harvard.edu/doa or www.ncrg.org for more information.

FUND-RAISING EVENTS

JCM/AGA Golf Classic 2001

May 21, 2001

JCM American Corporation and the American Gaming Association (AGA) will sponsor the 3rd annual golf tournament and auction to benefit the NCRG. The tournament will be held May 21, 2001, at the TPC at Summerlin in Las Vegas.

American Gaming Association Charity Dinner October 2001

The AGA will sponsor a dinner benefiting the NCRG during the week of the Global Gaming Expo, Oct. 1-3, 2001, in Las Vegas.

FINANCIAL STATEMENTS (UNAUDITED)

JANUARY 1, 2000 – DECEMBER 31, 2000

ASSETS

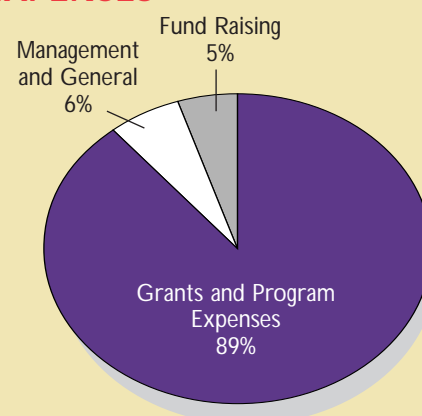
Current Assets	
Checking/Savings	\$1,598,002.78
Accounts Receivable	73,061.53
Total Current Assets	<u>1,671,064.31</u>
Other Assets	
Grants Receivable*	
2000	45,000.00
2001	1,093,000.00
2002	1,005,000.00
Beyond 2002	575,000.00
Unamortized Discount	(104,917.00)
Uncollectible Estimate	<u>(600,000.00)</u>
Total Pledges Receivable	<u>2,013,083.00</u>
Total Other Assets	<u>2,013,083.00</u>
TOTAL ASSETS	<u>\$3,684,147.31</u>

LIABILITIES & EQUITY

Liabilities	
Current Liabilities	
Accounts Payable	\$73,125.99
Other Current Liabilities	
Accrued Vacation	1,131.00
Grant Payable - Harvard 2001	1,100,000.00
Research Grants Payable**	<u>904,980.80</u>
Total Other Current Liabilities	<u>2,006,111.80</u>
Total Current Liabilities	<u>2,079,237.79</u>
Long Term Liabilities	
Grant Payable - Harvard 2002	1,100,000.00
Unamortized Discount	<u>(85,513.00)</u>
Total Long Term Liabilities	<u>1,014,487.00</u>
Total Liabilities	3,093,724.79
Equity	
Retained Earnings	3,616,776.86
Net Income	<u>(3,026,354.34)</u>
Total Equity	<u>590,422.52</u>
TOTAL LIABILITIES & EQUITY	<u>\$3,684,147.31</u>

National Center for Responsible Gaming

EXPENSES



All financial information as of Dec. 31, 2000,
compiled by Mayer Hoffman McCann L.C.

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

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

Inside back cover



**NATIONAL CENTER FOR
RESPONSIBLE GAMING**

**Aleasha T. Herdina
Acting Executive Director**

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