

**Meeting Minutes**  
**Department of Health and Human Services**  
**Public Health Service**  
**National Diabetes and Digestive and Kidney Diseases**  
**Advisory Council**  
**February 13-14, 2002**

**I. CALL TO ORDER**

NIDDK Director Dr. Allen Spiegel called to order the 158th National Diabetes and Digestive and Kidney Diseases Advisory Council meeting on February 13, at 8:28 a.m. in Conference Room 6, Building 31C on the NIH campus in Bethesda, MD.

Dr. Spiegel welcomed five new Council members. Two of the new members, Ms. Mary Clark, a Senior Public Health Consultant from Sterling, Virginia, and Dr. Richard Goodman, the Director and Senior Scientist at the Vollum Institute for Advanced Biomedical Research at Oregon Health Sciences University, will join the Diabetes, Endocrinology, and Metabolic Diseases (DEM) Subcommittee. The other three new members, Dr. Sum Lee, Professor and Chief of the Division of Gastroenterology at the University of Washington; Ms. Nancy Norton, Founder and President of the International Foundation for Functional Gastrointestinal Disorders; and Dr. W. Allan Walker, the Conrad Taff Professor of Nutrition in the Department of Pediatrics, Children's Hospital, Boston, will join the Digestive Diseases and Nutrition (DDN) Subcommittee.

**A. ATTENDANCE - COUNCIL MEMBERS PRESENT**

(Full Roster - See Attachment A)

Mr. David Baldrige  
Dr. Edward J. Benz, Jr.  
Dr. Jose Caro  
Ms. Mary E. Clark  
Dr. Richard H. Goodman  
Dr. Jeffrey I. Gordon  
Hon. Levan Gordon  
Dr. Edward W. Holmes  
Dr. C. Ronald Kahn  
Dr. James W. Kikendall (*Ex officio*)

Dr. Sum P. Lee  
Dr. John McConnell  
Ms. Nancy J. Norton  
Dr. Daniel Porte, Jr. (*Ex Officio*)  
Dr. Sandra Puczynski  
Dr. Vicki Ratner  
Dr. Robert W. Schrier  
Dr. Joseph T. Spence (*Ex Officio*)  
Dr. W. Allan Walker

*Also present:*

Dr. Allen Spiegel, Director NIDDK and Chairperson, NDDK Advisory Council  
Dr. Griffin Rodgers, Deputy Director, NIDDK  
Dr. Robert Hammond, Executive Secretary, NDDK Advisory Council

*Council members absent:*

Dr. Carolyn Kelly  
Dr. Rena Wing

## **B. NIDDK STAFF AND GUESTS**

In addition to Council members, others in attendance included NIDDK staff members, representatives of the NIH Office of the Director (OD), Center for Scientific Review (CSR) Scientific Review Administrators, and other NIH staff members. Guests were present during the open sessions of the meeting. Attendees included the following:

Kristin Abraham, NIDDK;	Barbara Harrison, NIDDK;	Catherine McKeon, NIDDK;
Karen Adams, CSR;	Trude Hillard, NIDDK;	Catherine Meyers, NIDDK;
Linda Addison-Hardy, CSR;	Gladys H. Hirschman, NIDDK;	Carolyn Miles, CSR;
David Badman, NIDDK;	Jay Hoofnagle, NIDDK;	David Miller, NIDDK;
Michele Barnard, NIDDK;	Thomas H. Hostetter, NIDDK;	David Mineo, NIDDK;
Terry R. Bishop, NIDDK;	Ann Karen Howard, NIDDK;	Marjani Mitchell, NIDDK;
Sharon Bourque, NIDDK;	Van S. Hubbard, NIDDK;	Christopher Mullins, NIDDK;
Josephine Briggs, NIDDK;	James Hyde, NIDDK;	Neal Musto, NIDDK;
Francisco Calvo, NIDDK;	Stephen James, NIDDK;	Richard Panniers, CSR;
Anthony Caputi, American	Ann Jerkins, CSR;	Beth Paterson, NIDDK;
Foundation for Urologic Disease;	Ephraim Johnson, NIDDK;	Denise Payne, NIDDK;
Dolph Chianchiano, National	Wendy Johnson-Taylor, NIDDK;	Susan Perez, NephCure
Kidney Foundation;	Robert Karp, NIDDK;	Foundation;
John Connaughton, NIDDK;	Kieran Kelley, NIDDK;	Judith Podskalny, NIDDK;
Catherine Cowie, NIDDK;	Charlette Kenley, NIDDK;	Sharon Pope, NIDDK;
Nancy Cummings, NIDDK;	Mary Beth Kester, NIDDK;	Rose Pruitt, NIDDK;
Florence Danshes, NIDDK;	Mushtaq Khan, CSR;	Rebekah Rasooly, NIDDK;
Jane DeMouy, NIDDK;	Paul Kimmel, NIDDK;	Patricia Robuck, NIDDK;
Tony Demsey, OD;	Carolyn Kofa, NIDDK;	Mary Rosenberg, NIDDK;
Jackie Dobson, NIDDK;	Krish Krishnan, CSR;	Lakshmanan Sankaran, NIDDK;
Devon Drew, CSR;	Robert Kuczmariski, NIDDK;	Sheryl M. Sato, NIDDK;
Michael Edwards, NIDDK;	Maren Laughlin, NIDDK;	M. James Scherbenske, NIDDK;
Thomas Eggerman, NIDDK;	Kim M. Law, NIDDK;	Lisa Schwartzbach, NIDDK;
Jody Evans, NIDDK;	Todd Le, NIDDK;	Salvatore Sechi, NIDDK;
James Everhart, NIDDK;	Maxine Lesniak, CSR;	Jose Serrano, NIDDK;
Richard Farishian, NIDDK;	Barbara Linder, NIDDK;	Philip Smith, NIDDK;
Ned Feder, CSR;	Helen Ling, NIDDK;	Mehrdad Tondravi, NIDDK;
Carol Feld, NIDDK;	Billie Mackey, NIDDK;	George Tucker, NIDDK;
Olaf L. Fonville, NIDDK;	Saul Malozowski, NIDDK;	Renetta Turner, NIDDK;
Judith Fradkin, NIDDK;	Denise Manouelian, NIDDK;	Ana Velez, NIDDK;
Janet Gregory, NIDDK;	Donita Marconi, NIDDK;	Dorothy West, NIDDK;
Carol Renfrew Haft, NIDDK;	Ronald Margolis, NIDDK;	Susan Yanovski, NIDDK;
Frank A. Hamilton, NIDDK;	Dan Matsumoto, NIDDK;	Charles Zellers, NIDDK.
Maureen Harris, NIDDK;	Michael K. May, NIDDK;	

## **II. CONSIDERATION OF SUMMARY MINUTES OF THE 157<sup>th</sup> COUNCIL MEETING**

The Council members present accepted unanimously the summary minutes of the 157<sup>th</sup> NDDK Advisory Council meeting, which was conducted via two conference calls on September 20 and December 10, 2001.

## **III. FUTURE COUNCIL DATES**

Dr. Spiegel asked for consideration of meeting dates for future NDDK Advisory Council meetings, and the following meeting dates were proposed and accepted:

- May 30-31, 2002 (note: Thursday and Friday)
- September 18-19, 2002
- February 19-20, 2003
- June 11-12, 2003
- September 24-25, 2003
- February 4-5, 2004
- May 26-27, 2004
- September 22-23, 2004

#### IV. ANNOUNCEMENTS

Dr. Robert Hammond called the attention of the Council to the Confidentiality and Conflict of Interest Statements. After discussing the scope of confidentiality and conflict of interest, he requested that Council members comply with the requirements. He reminded Council members to avoid a conflict of interest by leaving the room when the Council discussed individual applications in which an actual or perceived conflict of interest might occur. Members were asked to sign a statement to this effect. Dr. Hammond noted that recusal is not required for *en bloc* actions.

#### V. REPORTS FROM THE DIRECTOR AND DEPUTY DIRECTOR

##### A. DIRECTOR'S REPORT

Dr. Spiegel opened his Director's report by introducing a number of new NIDDK staff members.

- **Division of Digestive Diseases and Nutrition:**

**Dr. Robert Karp**, formerly of the National Institute on Alcohol Abuse and Alcoholism, is the new program director for genetics and genomics in DDN and will have responsibility for genetic studies of gastrointestinal diseases, nutrition, and obesity.

**Dr. Robert Kuczmarski**, formerly of the National Center for Health Statistics at the Centers for Disease Control and Prevention, is director of the obesity prevention and treatment program in DDN. He will develop and coordinate clinical research on biomedical, behavioral, societal, and environmental approaches to the prevention and treatment of obesity.

- **Division of Kidney, Urology and Hematologic Diseases:**

**Dr. Stuart Howards** will be the senior scientific adviser to the NIDDK Director in urology. Dr. Howards will also assist the Division of Kidney, Urologic, and Hematologic Diseases (KUH) in the oversight of a number of large urology projects. He is now and will remain a pediatric urologist at the University of Virginia.

**Dr. Catherine Meyers** will be the program director in KUH for inflammatory renal diseases and will participate in oversight of trials relating to dialysis. She previously worked in the Office of Device Evaluation at the Food and Drug Administration (FDA).

**Dr. Christopher Mullins**, formerly of the National Institute of Child Health and Human Development, will assume direction of the programs in basic cell biology in bladder, prostate, and kidney in KUH.

**Dr. Rebekah Rasooly**, program director in genetics and genomics in KUH, will be involved in oversight of NIDDK's participation in trans-NIH genomics projects, development of an NIDDK repository for clinical trial specimens, and oversight of the Family Investigation of Nephropathy of Diabetes (FIND) project. She previously worked at the National Institute on Drug Abuse.

- **Division of Diabetes, Endocrinology and Metabolic Disease:**

**Dr. Kristin Abraham** will serve as director of the Cell Signaling program in DEM. She has previously worked at the University of Maryland.

**Dr. Thomas Eggerman** will be the director of the Islet Transplantation and Diabetes Centers program in DEM. He has most recently worked at the Center for Biologics at the FDA.

**Dr. Saul Malozowski** is a senior adviser in DEM for clinical trials and diabetes translation. Before joining NIDDK Dr. Malozowski worked at the FDA.

**Dr. Salvatore Sechi**, program director in Proteomics in DEM, will oversee the Structural Biology program. He has previously worked at the National Institute on Aging.

**Dr. Mehrdad Tondravi** will be program director for Bone, Mineral and Steroid Metabolism for DEM. Dr. Tondravi comes to NIDDK from the Holland Laboratory of the American Red Cross.

- **Division of Extramural Activities:**

**Dr. Maria Davila-Bloom, Dr. John Connaughton, and Dr. Michael Edwards** have joined the Division of Extramural Activities as Scientific Review Administrators. Dr. Davila-Bloom has worked at the Center for Food Safety and Applied Nutrition at the FDA. Dr. Connaughton has over twenty years of industry experience in the study of molecular biology and protein biochemistry. Dr. Edwards has previously worked at the Office of Technology Development.

- **Division of Nutrition Research Coordination:**

**Dr. Wendy Johnson-Taylor** will serve as a public health nutrition and health policy adviser within the Division of Nutrition Research Coordination. Before coming to

NIDDK Dr. Johnson-Taylor was Assistant Professor of Health Policy at Morgan State University in Baltimore, MD.

Dr. Spiegel then announced the departure of several NIDDK employees.

**Dr. Nancy Cummings** is retiring after 40 years of government service, the last 30 of which were at NIDDK. She is a former Associate Director for Kidney, Urologic, and Blood Diseases in what was previously the National Institute of Arthritis, Metabolism, and Digestive Diseases; most recently, she has worked in the Division of Nutrition Research Coordination.

**Dr. M. James Scherbenske** is retiring as program director for basic renal research and program director for the Renal Centers. Dr. Scherbenske has been with NIH for 33 years. The American Society of Nephrology has recently named a bridging award the “Scherbenske Award” in his honor.

**Dr. Maureen Harris** will be retiring after 34 years at NIH. Since 1977, Dr. Harris has been director of NIDDK’s National Diabetes Data Group. She conceived and produced “Diabetes in America,” which is often cited as the most authoritative source of information on diabetes and its complications in the U.S. For these achievements, Dr. Harris has received NIH and Public Health Service awards, and the American Diabetes Association’s Kelly West Award, the highest award for achievement in diabetes epidemiology.

Dr. Spiegel mentioned that **Dr. Marshall Horwitz**, an NIDDK-supported investigator at the University of Washington has received a Presidential Early Career Award for Scientists and Engineers. His research achievement was to identify the gene responsible for a cyclic disorder of blood cell production, neutrophil elastase.

Dr. Spiegel discussed some of the changes that have been implemented at NIH in response to the terrorist attacks on September 11, 2001. There will likely be a fence around the NIH campus. There will be a Visitors’ Center where people will be screened. These and other arrangements are mandated by the Office of Homeland Security.

Dr. Spiegel noted that Dr. Andrew von Eschenbach, formerly of the M.D. Anderson Hospital in Texas, was sworn in on February 4, 2002 as the new Director of the National Cancer Institute.

Dr. Spiegel said that Dr. Marvin Cassman, Director of the National Institute of General Medical Sciences, would be leaving NIH after 27 years. He will become Director of a new Institute for Quantitative Biomedical Research that will be associated with the University of California.

Dr. Spiegel next began a discussion of the NIH budget process and reminded the Council of the Institute’s need to consider three fiscal years simultaneously. NIH is currently in fiscal year 2002 (the fiscal year runs from October 1 through September 30). The President has just released his proposed budget for fiscal year 2003, which will begin October 1, 2002. NIDDK will begin planning initiatives for the fiscal year 2004 budget this summer.

Dr. Spiegel reviewed the Administration's proposed budget for the NIH for fiscal year 2003. This budget is in line with completion of the fifth year of the NIH budget doubling and contains the largest single increase ever proposed for the NIH. Most Institutes will receive an 8.3 percent increase in the President's proposed budget, with two notable exceptions. One is the National Institute for Allergy and Infectious Diseases, which will receive an overall increase of 62.5 percent – with \$1.2 billion allocated for bioterrorism research – bringing their total budget to close to \$4 billion; this makes NIAID the second-largest funded Institute in this proposed budget. The other is the National Cancer Institute, which is proposed to receive a special allocation for cancer research of \$176 million, for an overall increase of 12.3 percent. Their budget will be just under \$5 billion, and NCI will remain the largest-funded Institute. NIDDK is proposed to receive a 9.4 percent increase, which would increase our budget to just about \$1.6 billion. Dr. Spiegel noted that the President's Budget must first be enacted by Congress and that the proposed dollar amounts are subject to change.

Council members and Dr. Spiegel discussed ways in which the NIDDK's research efforts might fit into the fight against bioterrorism and how the Institute might be able to contribute to this effort.

Dr. Spiegel mentioned that during February Council the Institute begins – in a very preliminary way – to consider concepts for new Initiatives and invited Council members to put forward any ideas they might have. Dr. Spiegel pointed out that the Institute's trans-DK strategic planning groups were also a source of potential new Initiatives.

Dr. Spiegel reminded the Council members of Surgeon General Satcher's "Call to Action to Prevent and Decrease Overweight and Obesity," a project in which Dr. Van Hubbard of the Division of Nutrition Research Coordination has been greatly involved.

Dr. Spiegel drew the attention of Council members to two items: one having to do with correcting an imbalance in the average size of new versus competing renewal awards, and the other concerning a funding approach that the NIDDK is implementing called AFAR, for Accelerated Funding to Advance Research.

## **B. DEPUTY DIRECTOR'S REPORT - BUDGET REVIEW**

Dr. Griffin Rodgers, NIDDK Deputy Director, discussed the FY 2003 President's Budget and reviewed the Institute's FY 2001 actual expenditures and FY 2002 appropriated budget. Dr. Rodgers said that NIDDK received a 12.6 percent increase in FY 2002 as part of the five year doubling of the NIH budget by the U.S. Congress.

In FY 2001, NIDDK funded a total of 2,866 Research Project Grants, which includes competing and noncompeting applications and SBIR/STTR grants. In FY 2002, the Institute projects funding 3,007 RPG's. NIDDK funded 71 Research Centers in FY 2001 with 73 projected for FY 2002. Other research grants, including career awards, totaled 386 in FY 2001 and are estimated to rise to 470 in FY 2002. In the category of Research Training, which includes both institutional and individual awards, NIDDK supported 1,013 trainees in FY 2001 and projects the same number in FY 2002, although the average size of each award will increase. As part of

R&D Contracts, the Institute will participate in two Extramural Loan Repayment Programs beginning in 2002: one for individuals engaged in clinical research and one for pediatric research. The Loan Repayment Programs are authorized by Congressional language.

A Council member asked about the relative quality of scientists in the “pipeline.” Dr. Spiegel replied that, while generalization across an Institute with a research program as broad as NIDDK’s is difficult, it was his opinion that the pool of researchers was excellent. Other Council members inquired as to the relative success of trainees who pursue careers in research, and Dr. Rodgers indicated that the Institute was initiating efforts to better monitor and assess the progress of these individuals as they move from training grants and career awards to R01-type grants.

Dr. Rodgers next reviewed the Extramural Loan Repayment Programs in more detail. NIDDK is involved in two programs: one for clinical researchers and one for pediatric researchers. The purpose of these programs is to increase the recruitment and retention of highly qualified health professionals as clinical investigators and as pediatric researchers. In FY 2002, NIDDK will allocate \$2 million for approximately 20 awards. Dr. Rodgers invited Council members to provide feedback regarding potential reviewers as well as appropriate review criteria in selecting applicants. Council members discussed the importance of using this program to encourage new researchers to pursue careers in academic research, although Dr. Spiegel reminded Council that the Institute’s flexibility is limited by the restrictions present in the law as passed by Congress, as “clinical research” and “pediatric research” have been defined by Congressional language.

## **VI. SCIENTIFIC PRESENTATION – “SALT AND BLOOD PRESSURE: NEW INSIGHTS FROM HUMAN GENETIC STUDIES”**

Dr. Spiegel introduced Dr. Richard Lifton, Chair of the Department of Genetics and Professor of Genetics, Medicine, Biophysics, and Biochemistry at Yale University. Dr. Lifton is also an investigator of the Howard Hughes Medical Institute at Yale. Dr. Lifton’s laboratory has used genetic analysis to dissect physiologic processes that regulate cardiovascular and renal function in humans, with an emphasis on blood pressure regulation.

Dr. Lifton said that hypertension is probably the most common disease of the industrialized world, affecting more than 20 percent of the adult population. It is a major risk factor for death from stroke, heart attack, congestive heart failure, and end-stage renal disease. The pathogenesis of hypertension is unknown in the vast majority of affected individuals. It is believed to be a multifactorial trait arising from an interplay of a variety of genes with environmental and demographic factors. Dr. Lifton’s group’s strategy is to study people at the extremes of the distribution of blood pressures – either very low or very high – to identify the molecular pathways that play a role in variation in blood pressure in humans. This approach involves phenotypic characterization of families and analysis of linkage comparing the inheritance of disease through families, leading ultimately to the identification of the underlying disease-causing genes. Thus far, Dr. Lifton’s group has identified mutations in six genes that drive blood pressure to the high end of the distribution and mutations in eight genes that drive blood pressure to the low end of the distribution. Perhaps the most intriguing outcome of these studies, according to Dr. Lifton, is that all of these genes act in a common pathway to change how the

kidney handles salt. Mutations that increase net sodium reabsorption raise blood pressure; conversely, mutations that reduce net sodium reabsorption lower blood pressure. This work has resurrected previous targets as well as identified a host of new targets for new and improved anti-hypertensive diuretic medications. It has also explained aspects of disease physiology and provided new diagnostic tests as well as new insights into physiology.

## **VII. ADJOURN FOR LUNCH**

Dr. Spiegel adjourned the first Open Session of the Council meeting at 12:01 p.m.

## **VIII. SUBCOMMITTEE MEETINGS**

At approximately 1:30 p.m., separate meetings were convened of the Diabetes, Endocrinology, and Metabolic Diseases; the Digestive Diseases and Nutrition; and the Kidney, Urologic, and Hematologic Diseases.

Subcommittee meetings reconvened on February 14 at approximately 8:00 a.m. and continued until approximately 9:45 a.m.

## **IX. REPORTS OF SUBCOMMITTEES: CONSIDERATION OF APPLICATIONS (CLOSED SESSION)**

## **X. UPDATES FROM PLANNING AND STRATEGIC PLANNING GROUPS**

On February 14, at 10:07 a.m., Dr. Spiegel reconvened the Open Session of the meeting of the full NDDK Advisory Council. Reports from two of the Institute's trans-NIDDK strategic planning groups and Division Directors' reports followed.

### ***Genetics, Genomics, and Bioinformatics – Dr. Philip Smith***

Dr. Smith reported that the Genomics Working Group met on Tuesday, February 12 to discuss the issue of murine models of disease. The group heard reports from several large-scale genome-wide projects, including efforts at the Center for Drug-Induced Random Mutagenesis at Baylor, the Rat Physiome Project at the Medical College of Wisconsin, efforts at the Jackson Labs, and a new program to develop embryonic stem cell lines containing insertional mutants with insertional tags funded by the National Heart, Lung and Blood Institute.

The group urged NIDDK to develop workshops to allow particular disease researchers to develop standard screens and diagnostic criteria; to identify models that needed to be generated; ensure screens are appropriate and – in cases where screens do not exist – to develop a process to develop new screens; and to raise awareness among the NIDDK investigator community about these resources. The group also felt it was important to focus attention to the phenotyping of normal variation in strains of importance to NIDDK researchers.

Dr. Smith said that the group emphasized the importance of integrating physician-scientists, animal physiologists, molecular biologists, and molecular geneticists in the pursuit of these



goals, and Dr. Smith cited Dr. Lifton's presentation as an example of the rewards possible when these disciplines coordinate.

The group also noted that high cost and lack of standardization of animal care and housing sometimes represent a sizeable burden to the research community. Council members noted the possibility of cost saving through automation in animal care. Others commented on the difficulty of defining "pathogens" in animals maintained in barrier facilities.

Dr. Smith indicated that a summary of the meeting would subsequently be available on the NIDDK web site.

### ***Disease Prevention and Management – Dr. James Everhart and Dr. Rebekah Rasooly***

The meeting of this working group was scheduled to follow the Council meeting. Dr. Everhart provided a preview of the meeting.

In past meetings, the group has taken up topics such as soliciting the advice of Council and others on major new clinical projects, developing a repository for data and samples, increasing minority recruitment into clinical studies, and collaboration with the private sector. Dr. Everhart noted that the subject of the afternoon meeting would relate to the first of these four objectives: major new clinical projects. There will be a discussion of two clinical initiatives, one from DDN and one from KUH. The first is a network to look at agents that trigger hepatotoxicity. The goal is to clearly characterize these cases and store appropriate biological material for future investigation. The second is a clinical trial of daily dialysis in chronic renal failure. The issue is whether standard dialysis – typically three times a week – or daily dialysis is more efficacious. Dr. Everhart noted that Council members, outside experts, and representatives of other government agencies would be present to provide input.

Dr. Rebekah Rasooly next reviewed the advantages of a central repository for tissue and data. Following a large clinical trial, such repositories allow scientists not directly involved in the original trial to ask questions, thereby making these resources and data available to the entire community of researchers. Dr. Rasooly indicated that relevant repositories might include a biosample repository, a database repository, a genetics repository, and possibly a sample analysis facility. She indicated that the Institute is in the process of implementing a plan for a repository and hopes to issue a Request for Proposals within the next few months.

Dr. Spiegel noted that the trans-NIDDK strategic planning group not represented at this meeting – the Stem Cells and Developmental Biology planning group – has generated a number of initiatives relating to progenitor cell genome anatomy projects. Projects focusing on hematopoietic stem cells as well as other cells of great interest to NIDDK – such as islet and beta cells and liver cells – are under consideration.

## **XI. REPORTS FROM DIVISION DIRECTORS**

### ***Division of Extramural Activities – Dr. Robert Hammond***

Dr. Hammond reviewed recent changes in Council operating procedures. These changes were suggested by a small working group consisting of NIDDK staff as well as Council members Mr. Baldrige, Dr. Caro, Dr. Benz, and Dr. Wing. The group proposed a number of modifications to operating procedures aimed at streamlining the closed sessions of Council in order to leave more time for discussion of broad issues in open session. These three suggested revisions – expedited concurrence of *en bloc* actions, the Council delegation for administrative supplements, and the increase in MERIT extension requests from 3 to up to 5 years – were approved at the December Council meeting.

Dr. Hammond called for a formal vote in open session to approve the overall operating procedures. The procedures were approved unanimously.

Dr. Hammond next called Council's attention to a list of RFA's that will be considered for second level review in May 2002.

### ***Division of Diabetes, Endocrinology, and Metabolic Diseases – Dr. Judith Fradkin***

Dr. Fradkin began her report with discussion of the Congressional request for a progress report on the scientific implementation of the 5-year Strategic Plan of the Diabetes Research Working Group (DRWG). This will be a trans-NIH report that will highlight the major research efforts undertaken across the NIH relative to the DRWG's key categories of scientific recommendations and identify important research advances and new scientific opportunities that have emerged since the issuance of the plan. NIDDK is coordinating this report. Much of the scientific input – including the identification of major scientific advances and opportunities – is being provided by outside experts in the form of meetings and workshops.

Dr. Fradkin next spoke of another Congressional report, this one concerning special funds for type 1 diabetes research. Pending approval by the Office of Management and Budget, as part of this report NIDDK will survey the grantees who have received awards and gather information about their accomplishments as a way to gauge the effectiveness of these funds in promoting research. The survey will also assess the relative success of attracting new researchers to diabetes and providing first support for new investigators. NIDDK will also reconvene an expert panel consisting of leading type 1 diabetes researchers to make additional recommendations with regard to use of these funds and new opportunities in type 1 research.

Dr. Fradkin next briefly reviewed the results of the Diabetes Prevention Program, a clinical trial that compared three approaches – lifestyle modification, treatment with metformin, and standard medical advice – in overweight people with impaired glucose tolerance at high risk for developing type 2 diabetes. The trial found that lifestyle changes were the most effective method for preventing the onset of type 2 diabetes in this population with a dramatic 58 percent reduction in the risk of developing type 2 diabetes, and that metformin reduced the risk of development of type 2 diabetes by 31 percent. Dr. Fradkin indicated that these results are being disseminated both in the scientific literature as well as through press conferences and the National Diabetes Education Program.

### ***Division of Kidney, Urologic, and Hematologic Diseases – Dr. Josephine Briggs***

Dr. Briggs reported that staff members in KUH are working to complete a strategic planning report from the bladder research progress review group meeting that was held in the summer of 2001. There was a recent workshop on red cell genomics. There will be a workshop of pediatric urologists and pediatric nephrologists to discuss neonatal hydronephrosis. Upcoming meetings include ones that focus on ways to perform clinical trials in a more cost-effective manner, a meeting to discuss the value of a possible longitudinal cohort study in pediatric kidney disease, a review of NIDDK's efforts in polycystic kidney disease, and another meeting on hyperoxalosis and other genetic stone diseases.

KUH is collaborating with DDN on two workshops: one on the management of hepatitis C in the context of kidney disease, and another on hepatocyte transplantation for metabolic disorders.

Dr. Briggs also announced that, as a way to maintain physician scientists and basic science manpower, KUH is assigning a staff member to each training awardee to act in a mentorship role. The Division has also held a series of workshops on preparing for a career in clinical investigative nephrology.

Dr. Briggs next highlighted a recent publication on the cloning of the gene for autosomal recessive polycystic kidney disease. This gene, whose transcript is over 13 kilobases and which has 66 exons, encodes a protein called fibrocystin.

### ***Division of Digestive Diseases and Nutrition – Dr. Jay Hoofnagle***

Dr. Hoofnagle welcomed the three new members Council who are assigned to DDN: Dr. W. Allan Walker, Ms. Nancy J. Norton, and Dr. Sum P. Lee.

Dr. Hoofnagle reported that in the previous year DDN had released two RFA's, one for investigator-initiated research on stem cells and developmental biology of the gastrointestinal tract, pancreas and liver, and the other for a clinical study of resistance to anti-viral therapy in hepatitis C. This clinical study is entitled Virahep-C and will enroll 400 patients, half of whom will be African American, as hepatitis C infections in this population seem especially resistant to current therapy.

In the current year, the Division will fund at least six centers as part of the Non-Alcoholic Steatohepatitis (NASH) Clinical Research Network. For the May Council, there will be three more clinical RFA's to consider on the topics of: living donor liver transplantation, biliary atresia, and the genetics of inflammatory bowel disease. For the September Council meeting there will be three more RFA's: one on Barrett's esophagus/GERD and esophageal carcinoma, one on the progenitor cell and genome anatomy projects, and a final, important solicitation for grants on prevention of obesity.

Initiatives for 2003 will likely include bariatric surgery for obesity; hepatotoxicity; and Adimap, the genome anatomy project of obesity. An NIH Consensus Development Conference on "Management of Hepatitis C" is scheduled for June 10-12, 2002 to discuss recommendations for

prevention and treatment of hepatitis C and to help map out a strategic plan for hepatitis C research.

Finally, Dr. Hoofnagle recognized Dr. Van Hubbard, Director of the Division of Nutrition Research Coordination. Dr. Hubbard was recently awarded the first George Bray Founders Award for contributions to obesity research by the North American Association for the Study of Obesity.

Dr. Spiegel seconded Dr. Hoofnagle's recognition of Dr. Hubbard, and pointed out that Dr. Hoofnagle himself had recently been honored by the American Association for the Study of Liver Diseases.

## **XII. CONSIDERATION OF REVIEW OF GRANT APPLICATIONS**

A total of 1,059 grant applications, requesting support of \$242,448,236 were reviewed for consideration at the February 13-14, 2002 meeting. Funding for 1,044 applications was recommended at a level of \$237,715,456.

## **XIII. ADJOURNMENT**

Dr. Spiegel thanked the Council members for their attendance and advice. There being no other business, Dr. Spiegel adjourned the 158th meeting of the NDDK Advisory Council on February 14, at 12:18 PM.

*I hereby certify that, to the best of my knowledge, the foregoing summary minutes and attachments are accurate and complete.*



*Allen Spiegel, M.D.  
Director, National Institute of Diabetes and Digestive and Kidney Diseases  
Chairman, National Diabetes and Digestive and Kidney Diseases Advisory Council*