



ROBERT WOOD JOHNSON MEDICAL SCHOOL RETIRED FACULTY ASSOCIATION NEWSLETTER

JANUARY 2017

VOLUME X, No. 1

UPCOMING RFA MEETING

“A Robot’s View of Our Ocean Planet”



Josh Kohut, Ph.D.

Associate Professor, Department of Marine
and Coastal Science, Rutgers University

Friday, March 3, 2017

Noon – 1:30 p.m.

Dean’s Conference Room

Rutgers Robert Wood Johnson Medical School

Piscataway, New Jersey

All current and retired faculty, staff, and students
are welcome to attend. Lunch will be available,
and contributions for the lunch may be made at
the meeting.

Attendees may park without a parking permit in
general parking in lots A, B, and C located next
to the medical school from 9 a.m. to 5 p.m.

IN VITRO FERTILIZATION: AN EMBRYONIC HISTORY

By Eckhard Kemmann, MD

When I started my training in Obstetrics-
Gynecology at SUNY Downstate-Kings County
Hospital in Brooklyn almost five decades ago,
infertility was encountered by ten percent of
couples, and treatment options were limited and
primarily surgical. My teachers and mentors at
the institution represented different aspects of
the presently evolving field of reproductive
medicine. Dr. A. Siegler was a pioneer in tubal
surgery and laparoscopy – in the 80s he would
introduce laparoscopy to China. Dr. J. R. Jones
was an early expert in reproductive hormone
research, and Dr. A. Gemzell had come from
Sweden where he faced mandatory retirement
at the age of 65 and brought his expertise to the
United States in the use of ovulation induction.
Dr. Gemzell was the first to isolate and use
(continued on page 2)

TABLE OF CONTENTS	PAGE
Upcoming Meeting	1
<i>In Vitro</i> Fertilization: An Embryonic History by Eckhard Kemmann, MD	1
I See You by Elliot Sultanik, MD, Class of 2016	4
RWJMS RFA Election Results	5
Retired RWJMS Faculty Program to Mentor Medical Students	5
Faculty Transition to Retirement Program	6
In Memoriam: Sidney Pestka, MD from Sherine E. Gabriel, MD, MSc	7
Global Health Fellowship Fund	8
RFA Membership	8
Membership Application and Donation Form	9

RWJMS RETIRED FACULTY ASSOCIATION

Officers

Michael Gochfeld, MD, PhD, President
David Seiden, PhD, Vice President
Paul Lehrer, PhD, Treasurer
David Riley, MD, Secretary

Election and Membership Committee

David Seiden, PhD, Chair
Mordechai Bermann, MD
Norma Greenfield, PhD
John Lenard, PhD

Program Committee

Gordon Schochet, PhD, Chair
Eckhard Kemmann, MD
Joseph Lieberman, MD
Sandra Moss, MD
Mary Swigar, MD

RFA Newsletter Editor

Michael Gochfeld, MD, PhD

RFA Website:

<http://rwjms.rutgers.edu/faculty/index.html#>

In Vitro Fertilization

(continued from page 1)

human gonadotropins to achieve pregnancy in humans. Initially, he had used cadaver pituitary glands, an unfortunate choice as later some of his patients died from Creutzfeld - Jakob disease. By the 70s, due to the work by Dr. Donini in Italy, the source of human gonadotropins to induce ovulation had been switched to urine collected at convents from menopausal, elderly nuns. The urinary purification process was commercialized, and the Serono company was founded and marketed urinary FSH as Pergonal.

Thus, important preconditions were met to explore *in vitro* fertilization which was fully recognized as a promising approach to overcome specifically tubal infertility problems. However, in 1973 a moratorium had been issued in the United States, stopping all IVF work. How could it come to that?

IVF Pregnancy

The United States was prominent in early IVF pregnancy research. In the 1940s, Drs. Rock and Menkin in Boston attempted fertilization of oocytes obtained from fresh surgical specimens. In 1959, Dr. M. C. Chang demonstrated successful mammalian IVF fertilization with healthy offspring in rabbits and rodents. His research indicated the need for sperm capacitation, a required step in the maturation of mammalian spermatozoa to render them competent to fertilize an oocyte. In the 60s, Drs. Howard and Georgianna Jones from Johns Hopkins reported that early embryos could be obtained by IVF, but they were not able to achieve a pregnancy.

In the early 70s, a race was on in various countries – USA, Australia, United Kingdom – to attain the first successful IVF pregnancy. Among the researchers was Dr. Shettles from New York who attempted an IVF procedure in 1973. Oocytes from his patient were obtained by laparoscopy and brought to Columbia Presbyterian Hospital by her husband via taxi. At the hospital Dr. Shettles attempted to fertilize these with the capacitated sperm of the husband. Dr. Shettles had not informed the institution about his doings. When the chair of the department learned of it, he immediately shut the experiment down. The patient couple sued, and both husband and wife were awarded money for their distress five years later, she \$50,000 and he \$3. Dr. Shettles had to resign and went to Las Vegas to open a cloning clinic (not successful). Importantly, the U.S. Government issued a moratorium on all IVF activities.

Dr. Robert Edwards, from the United Kingdom, had been at Johns Hopkins and worked with the Joneses on human fertilization. Upon his return to Cambridge, he looked for ways to obtain oocytes and met Dr. Steptoe. Dr. Steptoe had been trained in laparoscopy by Drs. Raol Palmer (France) and Hans Frangenheim (Germany) and published the first book on gynecologic laparoscopy in the English language in 1967. Shortly thereafter, he received a call from Dr. Edwards with an invitation to collaborate on the IVF project. Dr. Steptoe would recover oocytes from infertile patients at a small hospital in Oldham, and Dr. Edwards would attempt the fertilization process to get the embryos for a (continued on page 3)

In Vitro Fertilization

(continued from page 2)

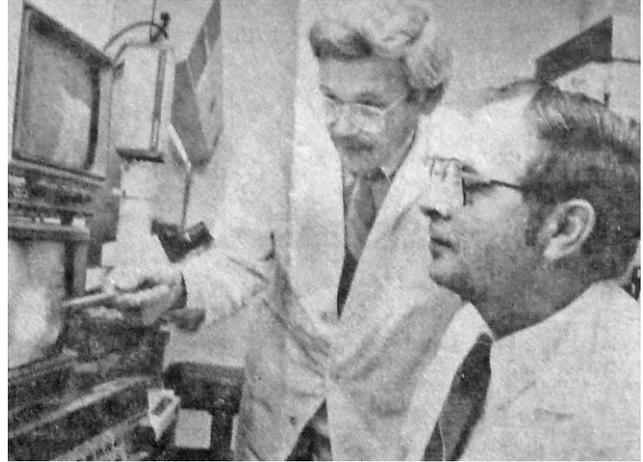
transfer into the patient's womb. The government rejected funding for the project, and the work was funded by patients' support. After some failures (miscarriage, ectopic pregnancy) Drs. Edwards and Steptoe announced the birth of the first IVF baby, Louise Brown, on July 25, 1978. This advance hinged on a single case. The obstetrician remarked that if, by chance, the baby would have been not normal, the whole IVF process would have been discredited. Dr. Edwards, later to receive the Nobel Prize in Medicine in 2010, remarked that opposition to IVF at that time was fierce and sometimes vicious.

Five months after the event in England, a girl was born in Kolkata, India, her name "Durga." Dr. S. Mukherjee had performed the IVF that resulted in her birth, but was denied recognition. The local government declared the event bogus, forbade him to travel, and transferred him to the ophthalmology department. He committed suicide in 1981. Later investigations of his records gave him posthumous recognition for his achievement.

Over 5 Million IVF Births

After the birth in England, IVF births were reported in Australia in 1980 and in the USA in 1981. The U.S. program had been set up in Norfolk by the Joneses, husband and wife physicians formerly at Johns Hopkins, and had to overcome initial objections and demonstrations. Once successful, the Joneses invited interested specialists to a conference to discuss their expertise and help spread knowledge of IVF. Dr. Robert Shelden, a colleague of mine at Rutgers Medical School, and I attended that conference in 1982. The first program in the northeast was at Yale (1982). The first IVF program in New Jersey opened in 1983 at Rutgers (then UMDNJ) in New Brunswick. At the fall meeting of the NY Ob Society, three programs reported successful pregnancies by IVF, Rutgers among them. Three decades later more than 5 million births had been achieved worldwide using IVF.

When the IVF program at then Middlesex General Hospital was set up, we used a surplus delivery room for egg retrievals, and



Dr. Eckhard Kemmann (left side of the photo) and Dr. Robert Shelden in the IVF Laboratory (photo taken about 1989)

Dr. Shelden had a small fertilization laboratory adjacent to the room. Several years later, when we had outgrown the space, we moved to new facilities on George Street in New Brunswick. Improvements and extensions followed quickly during a golden decade of IVF inventions. Cryopreservation of embryos was described in 1983 (Trounson), followed by oocyte cryopreservation three years later. Dellenbach introduced vaginal oocyte retrieval in 1984 and visited us soon thereafter to demonstrate his technique that made laparoscopic retrieval superfluous. Palermo introduced ICSI (intracytoplasmic sperm injection) in 1992, greatly improving the chances to achieve fertilization if sperm counts were abnormal. Even men with azoospermia could now become fathers if sperm could be recovered surgically from the testes. Embryo testing was introduced by using FISH (Munne, 1993) and the polymerase chain reaction (Handyside, 1992). Much was learned about better patient selection. While initially only patients received IVF as a last resort treatment, it was recognized that age was a critical factor, and women over 40 had only very limited chances of success. Now patients are younger and go to IVF relatively quickly. Third party reproduction took off in the 1980s with the use of donor oocytes, donor sperm, and surrogate gestation. Improvements in medication resulted in better control of the ovulation stimulation.

(continued on page 4)

In Vitro Fertilization

(continued from page 3)

During these years, a number of missteps achieved notoriety. For example, a physician in New York was jailed for miscoding and fraud as he tried to help patients with insurance reimbursements; IVF was usually not covered by insurance at that time. A physician and an embryologist in California left the country being accused of implanting (by accident or intent?) other patient's embryos without consent.

IVF Programs at Present

More and more IVF programs have become private subspecialty operations, essentially for economic reasons. In 2006, when Drs. Sheldon and I retired, RWJMS made the decision not to continue its own program. Pregnancy rates of USA programs are annually collected by SART and published. In 2014, overall pregnancy rates for IVF were about 43 per cent whereby a quarter of these were multiples (mostly twins). It is not apparent that cryopreserved embryos are less effective than fresh embryos to result in a

pregnancy, making single embryo transfer (and freezing surplus embryos) a reasonable approach to reduce the multiple pregnancy problem IVF children tend to have such as lower weight and a higher risk of prematurity and malformation; it is unclear if this relates to patient or procedural factors. Another problem of IVF treatment is ovarian hyperstimulation; here medication choice and control are the keys to contain this complication. Oocyte donation remains largely unregulated. There is a need to study the effect of oocyte donation on donors on a long-term basis.

Embryo preimplantation diagnosis and manipulation are areas of very active research. Thus, just a few weeks ago, Dr. Zhang reported on a procedure in which a pregnancy was achieved with a donor oocyte whose nucleus had been removed and replaced by a nucleus from the mother to overcome a mitochondrial disease. The field is young, and as we learn more, "we will learn things we cannot even imagine" (embryologist Dr. A. Brivanlou). ■

I SEE YOU

By Elliot Sultank, MD, Class of 2016

[Editor's Note: Elliot Sultank, MD, graduated in May 2016 from Rutgers Robert Wood Johnson Medical School. He is presently doing his residency in Internal Medicine at the University of Maryland Medical Center. Below is an excerpt from his address at the Class of 2016 Convocation at the State Theatre of New Brunswick, N.J.]

If you look around at my colleagues sitting before you, ... you will see a group of individuals who are tirelessly trying to enhance the lives of countless others, colleagues who shoulder the responsibility of a community, spending endless hours running a free clinic in New Brunswick, colleagues who said it is not sufficient to treat people in our own community. We need to go to India, we need to go to South America, and treat patients there too. It is not enough to just treat the people here...

In the central highlands in Africa, there are very few automobiles so everybody has to walk around to get to their destination. And on the trails naturally you knock into your fellow men. You say, "Good morning, how are you?" In the

central highlands in Africa, the response of the recipient of the greeting is quite different than our response. It is fascinating. Generally when someone says, "Good morning, how are you?" you say, "Good. How are you?" Not here. They look at each other and the translation into English is "I see you. I see you." Colleagues have internalized this sentiment. How many times have I walked into a room with a colleague who immediately sensed confusion and nervousness of the patient, who would sit down next to the patient, touch the patient and look them in the eye and without exchanging any words would say, "I see you. I am listening to you." How many times have I seen that? How many times have you looked at the patient afterwards and said, "Oh, my God. Nobody explained the disease (to the patient)." And then you would walk out with your friend and you said, "That was amazing what you did." And they would look at you and they would be like "What? It was obvious." It was not obvious. It is only obvious when you are so socially attuned, so socially aware, when you are so sensitive to the (continued on page 5)

I See You

(continued from page 4)

feelings of others that the cues become a little clearer. Those are my friends.

“One Day I Will Walk My Daughter Down the Aisle”

I would like to share with you a story, one which I had to beg a fellow graduate to tell you tonight. During my fourth year I once walked into a room ready to introduce myself, the usual “Hi, I am Elliott. I am a fourth year...” The patient interrupted me and said, “Hey, doc, do you know so and so?” I said, “Yeah, he is a great guy. He is in my class.” And he looked at me and said, “No, doc, he is the best.” I said, “I think so too, but why don’t you tell me why.” The patient got very, very serious and said, “Doc, I do not go to the doctor ever. The nagging of my wife finally...I said, Alright, I am going to go. I went to the doctor and he ran some tests and he came back and he said, ‘You have diabetes and you have a problem with your heart.’ And then he started talking about numbers, needles, and insulin. Doc, I barely graduated college. I do not know what insulin is. I did not have the time. I do not know what a pancreas is either.

“So I left and I went home and I said, forget these doctors. I am not going to go. Then I got a little scared and so I said, you know what, I am going to find a new doctor. The first person I saw when I walked into the room was your colleague. And your colleague stayed there and sat with me for an hour explaining to me what diabetes is, explaining to me the complications of it. Your colleague sat there explaining to me what I need to eat in order to get my numbers down, how I need to exercise. For an hour, and he did not tell me what to do, he did it with me.

Doc, I have lost 15 pounds so far and my sugar is down two points.” He looked at me straight and with his Italian accent, he said, “Doc, I want to stick around for a while.” He looked at me and said, “Doc, I want to watch my kids graduate college.” And he looked at me and said, “Doc, one day I will walk my daughter down the aisle.” He pointed to me and he goes, “That is because of your friend, Doc. It is because of your friend.” You think only one life was affected that day?

If you want to know the class of 2016, this is the class of 2016. Colleagues who inherently understand the words of Hippocrates, colleagues who are active in the practice of medicine, colleagues who when their names are mentioned will be a great source of pride for their families, for their friends, for their communities, and for Robert Wood Johnson. The class of 2016. I say with no sense of false humility, it has been the greatest honor and privilege in my life to be your classmate. I thank my lucky star every single day.... ■

RESULTS OF THE RWJMS RFA ELECTIONS

The names of the newly elected officer and committee members of the RWJMS Retired Faculty Association who were elected to a two-year term of office are shown below:

Secretary: David Riley, MD

Members of the Election and Membership Committee: Mordechai Bermann, MD
David Seiden, PhD

Program Committee: Joseph Lieberman, MD
Gordon Schochet, PhD
Mary Swigar, MD

RETIRED RWJMS FACULTY PROGRAM TO MENTOR MEDICAL STUDENTS

The RWJMS Retired Faculty Association has instituted a program by retired faculty to mentor current medical students. Dr. David Seiden, the vice-president of the RWJMS RFA, met with Drs. Sonia Laumbauch and Daniel Mehan, assistant deans for Student Affairs, to develop this volunteer program which was

enthusiastically endorsed by the RWJMS RFA Executive Committee. There are six designated areas of assistance. Retired faculty who would like to participate in this program should contact Dr. Seiden directly (email address: seiden@rwjms.rutgers.edu).
(continued on page 6)

Retired Faculty Student Mentoring Program

(continued from page 5)

The six designated areas for assisting medical students are shown below.

1. *Academic support within the area of expertise of the faculty member.*

This could include assisting students who are having academic difficulty in specific courses. It might include working with course directors in assisting M1 or M2 students preparing for remediation exams. It might include working with clerkship directors in assisting M3 students preparing for shelf exams.

2. *Research mentoring*

This might be general discussions of research in general and how it may be incorporated into one's career or perhaps advisement regarding specific areas of research within the expertise of the retired faculty member.

3. *Supervision of or assistance with Independent Projects*

All students are required to complete an independent scholarly project. Such projects must be approved by a faculty member but the mentoring by retired faculty in some projects could be very useful.

4. *Discussion of or exposure to specialty areas in medicine*

The process of exposing students to a variety of medical specialties to assist them in eventually choosing their own career paths is an ongoing process beginning in year one. Retired faculty could be helpful in this process.

5. *Enhancement of clinical skills*

Some students in their third and fourth years have the need to enhance their clinical skills. Pairing them with experienced clinicians can be of great assistance.

6. *General assistance to students in need of support (e.g. doubts about career)*

During their medical school careers, some students encounter periods when they have doubts about their decision to enter medical training. Having the ability to talk over their doubts and feelings with experienced faculty can be helpful.

Retired faculty who would be willing to assist in any of these areas should contact Dr. Seiden. ■

TRANSITION TO RETIREMENT PROGRAM FOR TENURED FACULTY

Dr. Karen Stubaus, Rutgers Vice President for Academic Affairs and Administration, in a memo dated December 26, 2016, reminded tenured faculty of a negotiated agreement with the AAUP-AFT and the AAUP-BHSNJ that allows tenured faculty members who meet eligibility criteria to participate in the Faculty Transition to Retirement Program (FTTRP).

To be eligible for the program, the faculty member must meet the following minimum requirements;

1. Must be a full-time faculty member at Rutgers Biomedical and Health Sciences
2. Must be a member of the Alternate Benefit Program
3. Must be at least 55 years of age on June 30 of the year in which the application is made
4. Must have at least 10 years of service at Rutgers on June 30 of the year in which the application is made.

Eligible faculty who apply for and are approved to participate in this program will announce their retirement and then enter into re-employment contract of up to three years; provided, however, that there shall be no such re-employment contract with a term longer than one year...The effective date of tenure relinquishment shall be July 1 of the academic year following the faculty member's application...The terms of re-employment will not exceed 50 percent of a full-time faculty load, as approved by Rutgers. As retirees, participating faculty have no claims of tenure or other rights or obligations of a tenured member of the faculty...Employment under the FTTRP may begin immediately following the effective date of the faculty member's retirement.

More information may be found at the following website:

<http://academiclaborrelations.rutgers.edu>.

On the website, select "Resources."

For further information, contact Lisa Bonick, Executive Director of Academic Labor Relations at bonick@oldqueens.rutgers.edu or 848-932-7174. ■

In Memoriam:

Sidney Pestka, MD

**From Sherine E. Gabriel, MD, MSc
Dean, Rutgers Robert Wood Johnson Medical School**

It is with great sadness that I inform you of the passing of Sidney Pestka, MD, Emeritus Professor of Biochemistry and Molecular Biology. Dr. Pestka was an internationally renowned scientist in biotechnology and affectionately known as the “father of interferon” for his discovery in regard to the isolation of interferon genes and genetic engineering of interferon, which led to the largescale production of interferon as a therapeutic agent. He also made major contributions to our understanding of the purification and analysis of proteins and made significant discoveries concerning protein biosynthesis, receptors and cell signaling.

At the time of his passing, Dr. Pestka was founder and chair emeritus of PBL Assay Science, the company he began in his basement with his wife, Joan. Dr. Pestka joined the faculty of Robert Wood Johnson Medical School in 1986, as professor and chair of the Department of Molecular Genetics, Microbiology and Immunology, a position he held for 25 years before retiring in 2012 and becoming a member of the school’s volunteer faculty. He came to the medical school from the Roche Institute of Molecular Biology, where he had originally conducted his work on interferons, and was previously at the National Institutes of Health. According to his biography on PBL’s website, Dr. Pestka was “the named inventor on 270 U.S. and foreign patents, and has 442 publications and 178 abstracts in his name.”

Dr. Pestka received numerous awards throughout his career, one of the most significant of which was the National Medal of Technology presented to him by President George W. Bush at the White House on June 12, 2001. He also was the recipient of the 2004 Warren Alpert Foundation Scientific Prize from Harvard Medical School; the 2006 Lemelson-MIT Lifetime Achievement Award; and the 2009 Molecular Biology Medal from the National Institutes of Health, among many others.

Dr. Pestka graduated summa cum laude in chemistry from Princeton University and received a doctorate in medicine from the University of Pennsylvania. According to his bio, Dr. Pestka’s early work on the genetic code, protein synthesis and ribosome function in the laboratory of Dr. Marshall W. Nirenberg at the National Institutes of Health (NIH) led to Nirenberg’s 1968 Nobel Prize in Physiology or Medicine.

Please join me in expressing condolences to Dr. Pestka’s wife, Joan, family, friends, and colleagues at this difficult time. His loss will truly be felt within the scientific community.

Robert Wood Johnson Medical School Retired Faculty Association Global Health Fellowship Fund

The RFA is sponsoring medical students to learn, help, and teach in foreign countries, a potentially life-changing experience under the aegis of the Global Health initiative of Rutgers Robert Wood Johnson Medical School. The RFA is helping to support summer programs or international electives for medical students and is asking you to consider adding your support to this effort. All funds go to help the students without any deduction for administrative expense.

You can submit your donation to support the RFA Global Health Fellowship Fund by sending a check made payable to the "RWJMS Retired Faculty Association" and mailing it to Paul Lehrer, PhD, Department of Psychiatry, Rutgers Robert Wood Johnson Medical School, 671 Hoes Lane West, Piscataway, NJ 08854. All contributions are tax deductible as charitable contributions. The RFA is a 501(c)(3) tax-exempt organization.

The people listed below have made donations to support this fellowship during the 2016/2017 (**September 1, 2016 – December 31, 2017**) cycle. *See next page for an explanation of the period covered by the contributions.*

Benjamin Beede	Lourdes Laraya-Cuasay	Virginia Mehlenbeck
James Chandler	Eckhard Kemmann	Barbara Pollack
Michael Gallo	Paul Lehrer	David Riley
Michael Gochfeld	Joseph Lieberman	Marshall Swartzburg
Norma Greenfield	Paul Manowitz	Alan Spotnitz

RWJMS RETIRED FACULTY ASSOCIATION MEMBERSHIP

The members listed below have paid their RWJMS RFA dues during the 2016/2017 (**September 1, 2016 – December 31, 2017**) cycle.

Benjamin Beede	Michael Gochfeld	Alice Lazzarini	Barbara Pollack
James Chandler	Ann Gordon	Paul Lehrer	David Riley
Robert Edelberg	Norma Greenfield	Joseph Lieberman	Alan Spotnitz
David Egger	Eckhard Kemmann	Paul Manowitz	Paul Stein
Eric Eikenberry	Howard Kortis	Virginia Mehlenbeck	Marshall Swartzburg
Michael Gallo	Paula Krauser	Beverly Poelstra	Gisela Witz

Robert Wood Johnson Medical School Retired Faculty Association

The period covered for the RWJMS RFA dues is January 1, 2017 – December 31, 2017. All who have paid dues by September 1, 2016 will have their membership extended to December 31, 2017.

If you have not already done so, please send in your **2017** (January 1, 2017 – December 31, 2017) dues. Also, if you would like to support medical students to have an opportunity to participate in the Global Health program, consider donating to the RFA Global Health Fellowship Fund. Please send your check to Paul Lehrer. Both contributions are tax deductible as charitable contributions. Thank you.

RWJMS Retired Faculty Association 2017 (January 1, 2017 – December 31, 2017) Dues

Benefits of RFA Membership:

- Defining, advocating for, and publicizing the benefits of retired faculty at RWJMS,
- Fostering ongoing engagement and participation of retired faculty in RWJMS activities,
- Promoting continuing interaction among retirees,
- Providing information and options for faculty considering retirement, and
- Interacting with other academic retired faculty associations (e.g., The AAUP Emeriti Assembly of Rutgers University, The Rutgers Retired Faculty and Staff Association).

Please cut along the dotted line below and return that portion with your payment.

Please Print:

Name: _____

Address: _____

Phone: _____

E-mail address: _____

Please enclose a check for a donation to the Global Health Program and/or for dues (\$15) made payable to the "RWJMS Retired Faculty Association," and mail the check to Paul Lehrer, PhD, at the address shown below.

Global Health Program (indicate dollar amount) _____

RWJMS RFA Dues (\$15) _____

Total Amount _____

Paul Lehrer, PhD
Department of Psychiatry
Rutgers Robert Wood Johnson Medical School
671 Hoes Lane West
Piscataway, NJ 08854

Please include any personal information that you wish to share with others. Thank you.