



**MEMORANDUM**

**To:** Donna E. Shalala, President

**From:** Stephen Sapp  
Chair, Faculty Senate 

**Date:** January 14, 2008

**Subject:** Faculty Senate Legislation #2007-31(B) – Proposal for the Establishment of the Department of Human Genetics

\*\*\*\*\*

The Faculty Senate, at its November 28, 2007 meeting, voted unanimously to approve the Proposal for the establishment of the Department of Human Genetics. The proposal is attached for your review.

The legislation is now forwarded to you for your action.

SS/ef

cc: Thomas LeBlanc, Executive Vice President and Provost  
David J. Birnbach, Vice Provost for University Administration and Faculty Affairs

[Please contact the Senate office to view this proposal.]



**MEMORANDUM**

**To:** Donna E. Shalala, President

**From:** Stephen Sapp  
Chair, Faculty Senate 

**Date:** January 14, 2008

**Subject:** Faculty Senate Legislation #2007-31(B) – Proposal for the Establishment of the Department of Human Genetics

\*\*\*\*\*

The Faculty Senate, at its November 28, 2007 meeting, voted unanimously to approve the Proposal for the establishment of the Department of Human Genetics. The proposal is attached for your review.


The legislation is now forwarded to you for your action.

SS/ef

**cc:** Thomas LeBlanc, Executive Vice President and Provost  
David J. Birnbach, Vice Provost for University Administration and Faculty Affairs

Faculty Senate Legislation #2007-31(B) –Proposal for the establishment of the Department of Human Genetics

**PRESIDENT'S RESPONSE**

APPROVED:  DATE: 1/17/08  
(President's Signature)

OFFICE OR INDIVIDUAL TO IMPLEMENT: Dean Pascal Goldschmidt

EFFECTIVE DATE OF LEGISLATION: 1/17/08  
(if other than June 1 next following)

NOT APPROVED AND REFERRED TO: \_\_\_\_\_

REMARKS (IF NOT APPROVED): \_\_\_\_\_



**Proposal for the Establishment of a  
 Department of Human Genetics  
 at the University of Miami Miller School of Medicine**

**1. BACKGROUND**

The aim of this proposal is to establish a Department of Human Genetics at the University of Miami Miller School of Medicine and give it the momentum to quickly become one of the nation's leading comprehensive programs in genetics and genomics.

The field of genetics has grown more rapidly in recent years than any other area of medicine, especially since the completion of The Human Genome Project in 2003. It now goes far beyond the traditionally recognized single-gene disorders such as Huntington Disease, Sickle Cell Anemia, and Cystic Fibrosis to include complex conditions such as Autism, Alzheimer and Parkinson disease, heart disease and cancer. Understanding the mechanisms behind these multi-gene disorders has created the new field of genomic medicine.

Today, research into clinical human genetics is invariably an interdisciplinary exercise, bringing together clinicians from almost every medical discipline, and incorporating scientists with expertise in molecular biology, cell biology, biochemistry, and computer science. As a result of the incredible achievements and promises of genomic medicine, current NIH funding for multi-disciplinary research in genetics and genomics continues to be strong, despite the recent overall decline in NIH funding. In addition, there are more high impact journals with a genetics or genomics scope than ever before.

Like the field of human genetics, the University of Miami Miller School of Medicine is undergoing a period of dynamic expansion. Our aim is to hit the ground running with a state-of-the-art Department of Human Genetics that will identify disease-causing genes and networks of genes, investigate possible treatments, and redefine our understanding of medicine in the 21<sup>st</sup> century. We have successfully recruited two world leaders in human genetics and genomic medicine, Drs. Margaret A. Pericak-Vance, Jeffery M. Vance and their team. We are located in one of the most ethnically diverse areas of the United States; and we have a strong infrastructure that can support the rapid growth of a robust genetics and genomics research enterprise.

Simply put, we are in an extraordinary period of growth that is ideal for the establishment of a Department of Human Genetics and will position the University of Miami Miller School of Medicine as the leader in human genetics and genomics, education and service in Florida.

## **2. MISSION**

The Department of Human Genetics is dedicated to excellence and innovation in research and education of physicians and research scientists in the field of human genetics and genomics.

The overarching aims of the Department are to provide an academic home for genetics and genomics at the University, to uncover the genetic contributions to disease, to apply these findings to better patient care, and to educate the physicians, geneticists and genomicists of tomorrow.

## **3. MARKET ANALYSIS**

The potential establishment of a Department of Human Genetics at the University of Miami Miller School of Medicine needs to be examined with due consideration of our strengths and weaknesses, the opportunities that are currently open to us, and the challenges that we may face in the mid-term future.

### **3.1 Strengths**

- We are the oldest and most established medical school in South Florida, serving a population of 7 million or more.
- We have a large group of clinicians and researchers who are experts in areas of clinical medicine where genomics is rapidly becoming important.
- With the recruitment of the Vances and their collaborators, we are set to have an unmatched human genetics and genomics presence in South Florida.
- The interdisciplinary nature of genetics would be heightened by offering faculty with research activities in human genetics and genomics secondary appointments in their clinical or basic science area of expertise.
- We have an accredited residency program in Medical Genetics and are home to the Pathway in Medical Genetics, the first of its kind, nationally recognized 4-Year program where medical students are exposed to Medical Genetics throughout their medical school curriculum. A proposal for a multidisciplinary PhD Program in human genetics and genomics is in the process of being developed for approval by the appropriate School and University committees.
- The Louis Calder Memorial Library has significant genetics/genomics journal subscriptions and book holdings.

### **3.2 Weaknesses**

- We are one of the few top-level medical schools in the country that does not have a Department of Genetics. In 2006, nine of the top 10 medical schools by NIH funding have Departments of Genetics (Table 1) and approximately 50% of American Association of Universities (AAU) members have Departments of Genetics (Table 2).
- Researchers working in the areas of genetics and genomic medicine are spread throughout existing departments.

- Currently, geneticists and genomicists are not peer-reviewed for promotion and tenure by fellow geneticists.
- There is insufficient opportunity for the development of collaboration in genetics or genomics.

### **3.3 Opportunities**

- Under the leadership of Pascal Goldschmidt, the recently appointed Dean, a new vision for the Miller School of Medicine is being actualized. This is the time to build on our strengths and overcome our weaknesses. We are limited by not having an academic hub at the University for genetics and genomics research, but with the recruitment of a new team of world-renowned research geneticists, this is an ideal moment for the establishment of a Department of Human Genetics.

### **3.4 Challenges**

- Once a Department of Human Genetics has been established, we face the challenge of staying current with this fast changing field. To do this, we need to continue to recruit the best individuals in the field, offer unique collaborative opportunities, and maintain up-to-date training opportunities.
- In addition, we need to ensure that we continue to utilize the universality of genetics in medicine as a nucleus for collaboration among various investigators and disciplines, both within the University and beyond.
- Existing research geneticists and genomicists at the University of Miami Miller School of Medicine who are currently members of other departments may want to be included in the new department. We need to incorporate them as appropriate while maintaining their contributions to existing departments.

## **4. INITIAL DEVELOPMENT**

The new department will be called the Department of Human Genetics. It will have a Chairperson, several programs and a horizontal system of administrators, as outlined below.

### **4.1 Chairperson and Scope of Faculty**

The Department of Human Genetics will be led by an interim Chairperson, Jeffrey M. Vance, MD, PhD. Dr. Vance is the Chief of the Division of Human Genetics, in the Department of Medicine and the Director of the Center for Molecular Genetics and Genomic Medicine in the provisional Miami Institute for Human Genomics. Dr. Vance is boarded in both the American Board of Psychiatry and Neurology and the American College of Medical Genetics as a board-certified PhD Medical Geneticist. Dr. Vance's primary areas of expertise and national recognition are in neurogenetics, especially in Parkinson disease and Charcot-Marie-Tooth Disease, and also in cardiovascular genetics, human genotyping and banking of DNA samples, and the molecular aspects of the positional cloning of human disease. After the Department is formalized and in accordance with the Faculty Manual, the departmental faculty will serve as the Consultative Committee and advise the Dean on the appointment of the Department Chair.

The Department of Human Genetics will initially be comprised of 17 faculty members. The faculty intellect and talents represent the broad scope of modern

human genetics, and include the areas of fundamental genetics, clinical expertise and specialization necessary for a well-rounded approach to uncovering the genetic components of common complex human diseases. The faculty contains PhDs, MDs and MD/PhDs. They have expertise ranging from molecular genetics to genetic epidemiology, utilizing approaches such as the mapping of Mendelian and complex diseases to multidisciplinary know-how like the integration of genomic and statistical technologies and their application to diseases. In addition, the faculty contains varied clinical expertise including licensed clinical psychologists and board-certified pediatricians, neurologists, internists, and psychiatrists.

In addition to the usual administrative positions for the day-to-day running of the Department and management of its extramural funding, there will be three dedicated administrators to function as grant writer, web educational content developer, and publicity/development coordinator.

#### **4.2 Programs**

The Department of Human Genetics will initially be organized into four programs as outlined below. Interaction and exchange of ideas and materials between the programs is encouraged, as is the establishment of collaborative projects with other departments at the University.

##### 4.2.1 Clinical Genetics

Genomic Medicine, the application of our rapidly expanding knowledge of the human genome to medical practice, will be a major focus of the clinical arm of the Department. Specifically, this program will focus on genetic and genomic findings as they relate to complex, common diseases as well as to our understanding of pharmacogenomics. The program will initially be structured as a consult service supporting all disciplines of medicine. A website designed to be an information resource for physicians will also be developed and made available to all medical personnel. The website will provide the real-time updates to information related to genomic medicine. In addition, the department will contain individuals practicing in the more traditional Medical Genetics programs as well.

##### 4.2.2 Genomic Research Program

The Genomic Research Program will lead in the identification of genes and gene networks that cause disease. Using cutting-edge technology and innovative approaches, this program will work to discover the many genetic risk factors that affect susceptibility and prognosis for common, complex human disorders such as cardiovascular disease, autism and Parkinson's disease.

##### 4.2.3 Biorepository And Clinical Laboratories

A state-of-the-art DNA and tissue bank is now functional at the University of Miami Miller School of Medicine and will be housed within the Department of Human Genetics and the provisional Miami Institute of Human Genomics. The Biorepository will be the primary DNA Bank for the Miller School of Medicine and will have separate clinical and research banks, with the relevant documentation for consent, curation and management of each. The clinical laboratories currently located in the Dr. John T. McDonald Center will be incorporated into the new genetics department.

##### 4.2.4 Education and Outreach Program

The Department will eventually offer a number of education and outreach programs. Once faculty and staff are in place, each initiative will be designed in more detail and

proposals will be brought before the appropriate School and University committees according to the Faculty Manual.

Faculty from the Department of Human Genetics will be expected to seek membership in graduate programs and to act as mentors and supervisors to graduate students. In addition, a PhD program in human genetics and genomics is under development. There will be didactic teaching responsibilities both to medical and graduate students as well as undergraduates throughout the University.

An outreach program will expand the educational materials on our website and instigate interactions with the local community, including underserved and minority-serving schools.

#### **4.3 Space**

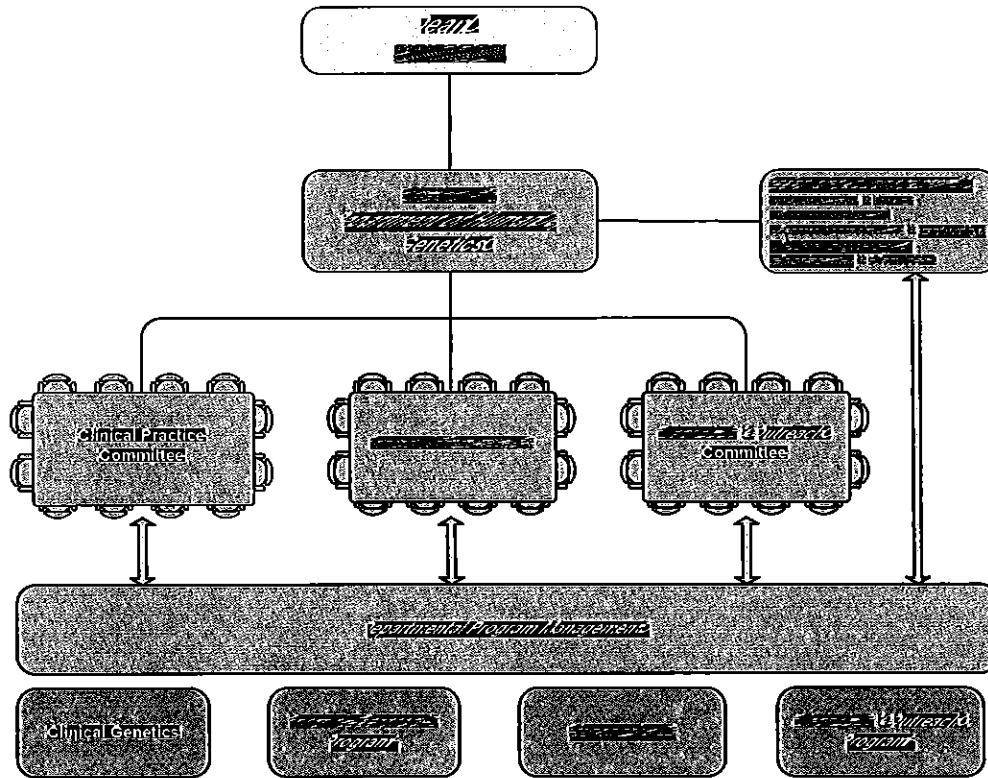
The research activities of the Department of Human Genetics will require well-equipped wet and dry (analytical) laboratory along with administrative space. Initially the Department will occupy space at both South Campus and the Clinical Research Building on the Medical Campus. Once the Multidisciplinary Research Building is completed (anticipated in 2008), the Department will occupy space in this new facility.

The Department's clinical activities will be conducted in UMHC/SCCC clinical space.



**5. ORGANIZATION**

The Department will be organized along traditional lines with the usual complement of committees that enable faculty to have a significant impact on the day-to-day operations and considerable input to the strategic direction of the Department within the established plan for the Miller School of Medicine and the University.



**6. SOURCES OF FUNDING**

The Department will support its activities through a variety of mechanisms. As in other research-intensive departments, Faculty members are expected to compete for grants and contracts. Current annualized extramural funding for the initial Departmental faculty is approximately \$6.3 million (direct costs only).

Additional funds will be supplied by the Miller School of Medicine to support faculty research efforts, faculty recruiting, and departmental operations. The annual School allocation is anticipated to be approximately \$2-3 million, in line with that of other research-intensive departments at the School.

The existing Financial Records System, Budget Preparation System, Sponsored Programs and Medical Finance reporting tools (DMAS, Dolfin, etc) will be used for accounting and management information systems in order to provide the highest quality of financial control in full compliance with all University standards.

**7. SUMMARY**

We propose the establishment of a Department of Human Genetics at the University of Miami Miller School of Medicine. Its establishment addresses a longstanding gap at the School in that we are one of the very few top level medical schools that do not have a human genetics department. Our recent recruiting efforts combine with our existing strengths in human genetics and genomics to position us for rapid expansion and afford the opportunity create a world-class environment for research and education in human genetics and genomics. By establishing a Department of Human Genetics, we would be sending an important message to local, regional, national and international scientists, prospective patients, clients and students, as well as to funding agencies and philanthropists that we are firmly committed to the development of the field of genetics and genomic medicine. Furthermore, the creation of the Department would create a home for genetics and genomics research at the University and allow us to make a significant impact on clinical practices and human health by investigating diseases at the genetic level, by providing genetics services to the community, and by educating the physicians, geneticists and genomicists of tomorrow.

## 8. Appendix

Table 1. Top ten NIH-funded medical schools in the country (FY 2005)

1. Johns Hopkins University - Dept of Molecular Biology and Genetics
2. University of Pennsylvania - Dept of Genetics
3. UC, San Francisco - Institute for Human Genetics
4. Washington University - Dept of Genetics
5. Duke University - Dept of Molecular Genetics and Microbiology
6. University of Washington - Dept of Genome Sciences
7. UC, Los Angeles- Dept of Human Genetics
8. Yale University - Dept of Genetics
9. University of Pittsburgh - Dept of Human Genetics
10. University of Michigan - Dept of Human Genetics

Table 2. American Association of Universities (AAU) Members with Departments of Genetics.

- Case Western Reserve University - Dept of Genetics
- Cornell University - Dept of Molecular Biology and Genetics
- Duke University - Dept of Molecular Genetics and Microbiology
- Emory University - Dept of Human Genetics
- Harvard University - Dept of Genetics; Dept of Genetics & Complex Diseases
- Indiana University - Dept of Medical & Molecular Genetics
- Johns Hopkins University - Dept of Molecular Biology and Genetics
- McGill University - Dept of Human Genetics
- Michigan State University - Dept of Microbiology and Molecular Genetics
- Penn State University- Dept of Genetics; Dept of Development & Health Genetics
- Rutgers University- Dept of Genetics
- Stanford University - Dept of Genetics
- Stony Brook University - Dept of Molecular Genetics & Microbiology
- Tulane University - Graduate Dept of Human Genetics
- UC, Berkeley - Dept of Genetics
- UC, Irvine - Dept of Microbiology and Molecular Genetics
- UCLA - Dept of Human Genetics
- University of Chicago - Dept of Human Genetics; Dept of Molecular Genetics and Cell Biology
- University of Florida - Dept Molecular Genetics & Microbiology
- University of Michigan - Dept of Human Genetics
- University of Minnesota - Dept of Genetics, Cell Biology and Development
- UNC Chapel Hill - Dept of Genetics
- University of Pennsylvania - Dept of Genetics
- University of Pittsburgh - Dept of Human Genetics
- University of Texas, Austin - Dept Molecular Genetics & Microbiology
- University of Toronto - Dept of Molecular and Medical Genetics
- University of Virginia - Dept of Biochemistry and Molecular Genetics
- University of Washington - Dept of Genome Sciences
- University of Wisconsin, Madison - Dept of Genetics
- Washington University - Dept of Genetics
- Yale University - Dept of Genetics

**MILLER**  
SCHOOL OF MEDICINE

Pascal J. Goldschmidt, M.D., FACC  
*Senior Vice President for Medical Affairs and Dean*  
*Chief Executive Officer, Miami Medicine*

**Memorandum**

To: Iris Barrios  
Secretary of the Faculty Senate

From: Pascal G. Goldschmidt, M.D. PJG  
Senior Vice President for Medical Affairs and Dean

Date: October 15, 2007

Subject: Support for the Department of Human Genetics

This memo is to express my vigorous support for the creation of the Department of Human Genetics at the Miller School of Medicine and to request the University of Miami Faculty Senate approve this important initiative.

The establishment of a Department of Human Genetics is a critical structural element in the School's strategic plan to strengthen our faculty and programs in human genetics and genomics. This new department would position the Miller School of Medicine for rapid expansion and afford the opportunity to create a world-class environment for research and education in human genetics and genomics. Importantly, the creation of the department would build an academic home for genetics and genomics research at the University and allow us to make a significant impact on clinical practices and human health by investigating diseases at the genetic level, by providing genetics services to the community, and by educating the physicians, geneticists and genomicists of tomorrow.

This department will be an important and timely addition to the Miller School of Medicine. The School is fully committed to the success of the Department of Human Genetics. I fully endorse its creation.



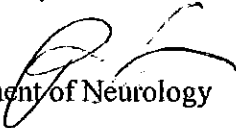
LEONARD M. MILLER SCHOOL OF MEDICINE  
Post Office Box 016099 (R-699) • Miami, Florida 33101  
Location: 1600 N.W. 10th Avenue, RMSB 1140 • Miami, Florida 33136  
305-243-6545 • Fax: 305-243-4888

# MILLER

SCHOOL OF MEDICINE

Ralph L. Sacco, MD, MS, FAHA, FAAN  
*Miller Professor of Neurology, Epidemiology & Human Genetics*  
*Chairman, Department of Neurology*  
*Neurologist-In-Chief Jackson Memorial Hospital*

To: Iris Barrios  
 Secretary of the Faculty Senate

From: Ralph Sacco, M.D.   
 Chairman, Department of Neurology

Date: October 15, 2007

Subject: Support for the Department of Human Genetics

This memo is to express my strongest recommendation for the establishment of the Department of Human Genetics at the Miller School of Medicine.

There is little doubt that the next breakthroughs in the management of complex common diseases like stroke, parkinsons disease, multiple sclerosis and other neurological disorders will come as a result of our ability to determine the genetic risk factors affecting susceptibility.

The new Department comes at an exciting time of expansion at the Miller School of Medicine - recent recruiting efforts have rounded out the critical mass of genetics and genomics experts. The new Department is positioned to not only provide leading edge technologies for basic discoveries, but to build bridges transferring new knowledge to the clinic.

Faculty in the Department of Neurology are thrilled at the prospect of collaborating with the new Department and I offer our full cooperation in establishing strong ties with the new Department of Human Genetics. In the Department of Neurology, we are already actively collaborating with numerous members of this new strength on the campus. Over 3000 samples have been transferred from Columbia University as part of my stroke projects and new studies are being planned. As we recruit new faculty, work in neuron-genetics will be a key area of focus. We are also working on new genetics training opportunities to educate clinicians and scientists on the study of complex neurological diseases. We have a real opportunity to be an international leader in the study of human genetics and I am excited to work with my new colleagues in building these programs.

Cc: Pascal G. Goldschmidt, M.D.



# MILLER

SCHOOL OF MEDICINE

James D. Potter, Ph.D., FAHA  
*Professor and Chairman*  
*Department of Molecular and Cellular Pharmacology*


## MEMORANDUM

To: Iris Barrios  
Secretary of the Faculty Senate

From: James D. Potter, Ph.D., FAHA  
Chairman, Department of Molecular and Cellular Pharmacology

Date: October 15, 2007

Subject: Support for the Department of Human Genetics



This memo is to express my support for the establishment of the Department of Human Genetics at the Miller School of Medicine.

The Department would fill a critical need at our University – the creation of an academic hub for genetics and genomics research. The identification of genes and gene networks that cause disease is paramount to improving human health. The Department of Human Genetics promises to bring cutting-edge technology and innovative approaches to the discovery of genetic risk factors affecting susceptibility and prognosis for common but multi-faceted human disorders such as cardiovascular disease, neurological disorders and cancer.

Members of the Department of Molecular and Cellular Pharmacology are excited at the prospect of collaborating with the new Department and I offer our full cooperation in establishing strong ties with the new Department of Human Genetics.

cc: Pascal G. Goldschmidt, M.D.



LEONARD M. MILLER SCHOOL OF MEDICINE  
Post Office Box 016189 (R-189) • Miami, Florida 33101  
Location: 1600 NW 10th Avenue, RMSB 6085 • Miami, Florida 33136  
305-243-5874 • Fax: 305-324-6024 • jdpotter@miami.edu



DEPARTMENT OF MEDICINE

A. Mohsin Mian, Ph.D.

October 16, 2007

Steven Sapp, Ph.D.  
Chair, Faculty Senate  
325 Ashe Administrative Building  
Coral Gables Campus, LOC: 4634

Dear Professor Sapp,

The Miller School of Medicine Faculty School Council met on Tuesday, October 16, 2007 and reviewed the proposal presented by Dr. Jeffery Vance for the creation of the Department of Human Genetics. The Council members voted unanimously to approve the creation of this Department which is an important addition to the Miller School of Medicine.

Sincerely,

*A. Mohsin Mian*  
Abdul Mian, Ph.D., Speaker  
Miller School of Medicine  
University of Miami  
Medical Faculty Council

Mailing address:  
P.O. Box 019132 (M862), Miami, FL 33101  
Office: 305-243-4817  
Fax: 305-243-3181  
E-mail: amian@mednet.med.miami.edu

Office address:  
1600 N.W. 10 Avenue  
Rosenstiel Medical Science Building #7012-A  
Miami, Florida 33136

**November 28, 2007**  
**Faculty Senate Minutes**

The meeting, which was held in the McLamore Executive Education Center in the School of Business Administration, opened at 3:30.

**CHAIR'S REMARKS**

In addition to the printed Chair's remarks, the Chair reminded the Senate that the Fall Commencement will take place on Friday, December 14, and urged Senators to attend to represent the faculty on this important occasion in the lives of our students.

**PRESIDENT'S REMARKS**

The President announced that the papers have been signed for the purchase of the new University Hospital, with most of the funding for the purchase to come from clinical revenues. Sean Taylor's memorial service will take place December 3 at Florida International University because the university does not have enough parking capacity for the large number of people expected and the BankUnited Center is already heavily scheduled during that period. The President entertained questions from the floor.

A suggestion was made to send a condolence letter to Sean Taylor's family from the Senate, which the Chair will do.

**APPROVAL OF TODAY'S AGENDA**

The meeting agenda was *approved unanimously*.

**APPROVAL OF MINUTES**

The minutes of the October 31, 2007 Senate meeting were *approved unanimously*.

**AD HOC COMMITTEE REPORT ON EXTENSION OF PROBATIONARY PERIOD FOR TENURE IN the MILLER SCHOOL OF MEDICINE –Richard Williamson**

Dr. Williamson reported for the committee, outlining the process that had taken place and thanking the committee members for their hard work. He highlighted the main points of the proposal and answered questions from the floor. After an extensive discussion, a *motion was made and seconded* to approve the proposal, which *passed unanimously*.

**PROPOSED CHANGE IN CHARGE OF BUDGET AND COMPENSATION COMMITTEE- STEVE CANTRELL**

Dr. Cantrell presented a proposal to bring the committee charge in the *Faculty Manual* more into line with the actual function of the committee and entertained questions from the floor. After a discussion, a *motion was made and seconded* to approve the proposal. The motion was *approved unanimously*.



**PROPOSED LANGUAGE ON REVISION OF STATEMENT ON ACADEMIC FREEDOM FOR SECTION C8 IN THE FACULTY MANUAL – MARY COOMBS**

Dr. Coombs presented the proposal for the ad hoc committee. She then answered questions regarding the language. [A motion was made to extend discussion by 10 minutes.] *A motion was made and seconded to approve the proposal. The motion was approved unanimously.*

Thomas Steinfatt proposed an Ad Hoc Committee to examine the relationship between academic freedom and IRBs. The Senate Chair offered to appoint the committee.

**PROPOSAL FOR THE CREATION OF THE DEPARTMENT OF HUMAN GENETICS AT THE MILLER SCHOOL OF MEDICINE – JENNIFER McCafferty-Cepero, Assistant Dean for Research**

Dr. McCafferty-Cepero briefly introduced the proposal. There was no discussion. *A motion was made and seconded to approve the proposal and passed unanimously.*

**FOCUS THE NATION TEACH-IN ON GLOBAL WARMING – SCOTT LEWIS**

Scott Lewis introduced the proposal. After considerable discussion, *a motion was made and seconded for the Faculty Senate to endorse the request. The motion failed.* The Chair stated that as a result of the vote only the General Welfare Committee endorsed the request by virtue of action at its last meeting.

**Prior to the Senate's convening in Executive Session non-faculty members were excused at 5:45 p.m.**

EXECUTIVE SESSION

*(McKamre discussed)*

The meeting adjourned at 5:55 p.m.

**Faculty Senate Office**

---

**From:** Faculty Senate Office  
**Sent:** Friday, February 29, 2008 5:20 PM  
**To:** Birnbach, David J; /O=University of Miami/OU=Gables Central  
Email/cn=Recipients/cn=11592; /O=University of Miami/OU=Gables Central  
Email/cn=Recipients/cn=5402; /o=University of Miami/ou=Gables Central  
Email/cn=Recipients/cn=STAFFFACULTY/cn=lbrenner; /o=University of Miami/ou=Gables Central  
Email/cn=Recipients/cn=STAFFFACULTY/cn=rbuckley; 000AAAAA EUS; Berg, Shelton G.; Brown,  
Otis B.; Cabrera, Jose M.; Carpintero, Yvette M.; Fontellio, Dawn J; Garcia, Cecilia; Glemaud,  
Rose-Kettle; Goldschmidt, Pascal J.; Gonzalez, Martha Lopez; Grogg, Sam; Halleran, Michael Ros;  
Kahn, Barbara; Lepisto, Catherine; Lynch, Dennis O.; Peragallo, Nilda P; Plater-Zyberk, Elizabeth  
M.; Prilleltensky, Isaac; Ripoll, Blanca Ileana; Robitaille, Magaly; Rowand, Michele M; Ruiz, Odalis  
A.; Scandura, Teresa Anne; Stadmir, Dawn Renee; Tien, James M.; Walker, William  
**Cc:** Sapp, Stephen; Markowitz, Elizabeth Paz  
**Subject:** Approved Faculty SEnate legislation for your information

Attached are links to recently approved Faculty Senate legislation:

Legislation # [2007-31 \(B\)](#) - Proposal for the Establishment of the Department of Human Genetics

Legislation # [2007-32 \(B\)](#) - Extension of Probationary Period for Tenure in the Miller School of Medicine

Legislation # [2007-33 \(B\)](#) - Political Science Department transfer to College of Arts and Sciences

Legislation # [2007-34 \(B\)](#) - Transferring of the undergraduate marine and atmospheric science program from College of Arts and Sciences to Rosenstiel School of Marine and Atmospheric Science

Legislation # [2007-35 \(B\)](#) - Change in Faculty Manual Section C8 Academic Freedom

Legislation # [2007- 36 \(B\)](#) - Modification of Faculty Manual section B4.6 , Budget and Compensation Committee

Thank you,

Robyn Hardeman

Faculty Senate Office  
325 Ashe Administration Building  
1252 Memorial Drive  
Coral Gables, FL 33146  
305-284-3721  
[www.miami.edu/fs](http://www.miami.edu/fs)

**FACULTY SENATE MEETING AGENDA**  
**McLamore Executive Education Center**  
**3<sup>rd</sup> Floor- Jenkins Building**  
**November 28, 2007 - 3:30 P.M.**

<b>A.</b>	<b><u>Introductory Matters</u></b>	<b>Approx. Time</b>
A1.	#Chair's remarks	3:30
A2.	President's remarks	3:35
A3.	Approval of today's agenda	4:00
A4.	#Approval of minutes of October 31, 2007	4:05
A5.	Other announcements	4:10
<b>B.</b>	<b><u>General Matters</u></b>	
B1.	#Ad Hoc Committee Report on extension of Probationary Period for Tenure in the MSOM – Richard Williamson	4:15
B2.	#Proposed Change in Charge of Budget and Compensation Committee – Steven Cantrell	4:55
B3.	#Proposed language on revision of statement on Academic Freedom for section C8 in the Faculty Manual – Mary Coombs	5:10
B4.	#Proposal for the creation of the Department of Human Genetics at the Miller School of Medicine – Jennifer McCafferty-Cepero, Assistant Dean for Research	5:25
B5.	#Focus the Nation Teach-in on Global Warming- Scott Lewis	5:40
<b>C.</b>	<b><u>Other Business</u></b>	
<b>D.</b>	<b><u>Executive Session</u></b>	
D1.	Selection of McLamore Outstanding Service Award	5:45
D2.	Special Achievement Award	5:55
<b>E.</b>	<b><u>Adjournment</u></b>	

#related material

**MILLER**  
SCHOOL OF MEDICINE

Pascal J. Goldschmidt, M.D., FACC  
*Senior Vice President for Medical Affairs and Dean*  
*Chief Executive Officer, Miami Medicine*

Memorandum

To: Iris Barrios  
Secretary of the Faculty Senate

From: Pascal G. Goldschmidt, M.D. **PJG**  
Senior Vice President for Medical Affairs and Dean

Date: October 15, 2007

Subject: Support for the Department of Human Genetics

This memo is to express my vigorous support for the creation of the Department of Human Genetics at the Miller School of Medicine and to request the University of Miami Faculty Senate approve this important initiative.

The establishment of a Department of Human Genetics is a critical structural element in the School's strategic plan to strengthen our faculty and programs in human genetics and genomics. This new department would position the Miller School of Medicine for rapid expansion and afford the opportunity to create a world-class environment for research and education in human genetics and genomics. Importantly, the creation of the department would build an academic home for genetics and genomics research at the University and allow us to make a significant impact on clinical practices and human health by investigating diseases at the genetic level, by providing genetics services to the community, and by educating the physicians, geneticists and genomicists of tomorrow.

This department will be an important and timely addition to the Miller School of Medicine. The School is fully committed to the success of the Department of Human Genetics. I fully endorse its creation.

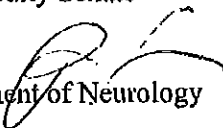


LEONARD M. MILLER SCHOOL OF MEDICINE  
Post Office Box 016099 (R-699) • Miami, Florida 33101  
Location: 1600 N.W. 10th Avenue, RMSB 1140 • Miami, Florida 33136  
305-243-6545 • Fax: 305-243-4888

**MILLER**  
SCHOOL OF MEDICINE

Ralph L. Sacco, MD, MS, FAHA, FAAN  
*Miller Professor of Neurology, Epidemiology & Human Genetics*  
*Chairman, Department of Neurology*  
*Neurology-In-Chief Jackson Memorial Hospital*

To: Iris Barrios  
Secretary of the Faculty Senate

From: Ralph Sacco, M.D.   
Chairman, Department of Neurology

Date: October 15, 2007

Subject: Support for the Department of Human Genetics

This memo is to express my strongest recommendation for the establishment of the Department of Human Genetics at the Miller School of Medicine.

There is little doubt that the next breakthroughs in the management of complex common diseases like stroke, parkinsons disease, multiple sclerosis and other neurological disorders will come as a result of our ability to determine the genetic risk factors affecting susceptibility.

The new Department comes at an exciting time of expansion at the Miller School of Medicine - recent recruiting efforts have rounded out the critical mass of genetics and genomics experts. The new Department is positioned to not only provide leading edge technologies for basic discoveries, but to build bridges transferring new knowledge to the clinic.

Faculty in the Department of Neurology are thrilled at the prospect of collaborating with the new Department and I offer our full cooperation in establishing strong ties with the new Department of Human Genetics. In the Department of Neurology, we are already actively collaborating with numerous members of this new strength on the campus. Over 3000 samples have been transferred from Columbia University as part of my stroke projects and new studies are being planned. As we recruit new faculty, work in neuron-genetics will be a key area of focus. We are also working on new genetics training opportunities to educate clinicians and scientists on the study of complex neurological diseases. We have a real opportunity to be an international leader in the study of human genetics and I am excited to work with my new colleagues in building these programs.

Cc: Pascal G. Goldschmidt, M.D.



**MILLER**  
SCHOOL OF MEDICINE

James D. Potter, Ph.D., FAHA  
*Professor and Chairman*  
*Department of Molecular and Cellular Pharmacology*

**MEMORANDUM**

To: Iris Barrios  
Secretary of the Faculty Senate

From: James D. Potter, Ph.D., FAHA  
Chairman, Department of Molecular and Cellular Pharmacology

Date: October 15, 2007

Subject: Support for the Department of Human Genetics



This memo is to express my support for the establishment of the Department of Human Genetics at the Miller School of Medicine.

The Department would fill a critical need at our University – the creation of an academic hub for genetics and genomics research. The identification of genes and gene networks that cause disease is paramount to improving human health. The Department of Human Genetics promises to bring cutting-edge technology and innovative approaches to the discovery of genetic risk factors affecting susceptibility and prognosis for common but multi-faceted human disorders such as cardiovascular disease, neurological disorders and cancer.

Members of the Department of Molecular and Cellular Pharmacology are excited at the prospect of collaborating with the new Department and I offer our full cooperation in establishing strong ties with the new Department of Human Genetics.

cc: Pascal G. Goldschmidt, M.D.



LEONARD M. MILLER SCHOOL OF MEDICINE  
Post Office Box 016189 (R-189) • Miami, Florida 33101  
Location: 1600 NW 10th Avenue, RMSB 6085 • Miami, Florida 33136  
305-243-5874 • Fax: 305-324-6024 • jdpotter@miami.edu



DEPARTMENT OF MEDICINE  
A. Mohsin Mian, Ph.D.

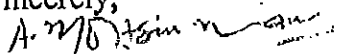
October 16, 2007

Steven Sapp, Ph.D.  
Chair, Faculty Senate  
325 Ashe Administrative Building  
Coral Gables Campus, LOC: 4634

Dear Professor Sapp,

The Miller School of Medicine Faculty School Council met on Tuesday, October 16, 2007 and reviewed the proposal presented by Dr. Jeffery Vance for the creation of the Department of Human Genetics. The Council members voted unanimously to approve the creation of this Department which is an important addition to the Miller School of Medicine.

Sincerely,

  
Abdul Mian, Ph.D., Speaker  
Miller School of Medicine  
University of Miami  
Medical Faculty Council

Mailing address:  
P.O. Box 019132 (M862), Miami, FL 33101  
Office: 305-243-4817  
Fax: 305-243-3181  
E-mail: amian@mednet.med.miami.edu

Office address:  
1600 N.W. 10 Avenue  
Rosenstiel Medical Science Building #7012-A  
Miami, Florida 33136





**Proposal for the Establishment of a  
Department of Human Genetics  
at the University of Miami Miller School of Medicine**

**1. BACKGROUND**

The aim of this proposal is to establish a Department of Human Genetics at the University of Miami Miller School of Medicine and give it the momentum to quickly become one of the nation's leading comprehensive programs in genetics and genomics.

The field of genetics has grown more rapidly in recent years than any other area of medicine, especially since the completion of The Human Genome Project in 2003. It now goes far beyond the traditionally recognized single-gene disorders such as Huntington Disease, Sickle Cell Anemia, and Cystic Fibrosis to include complex conditions such as Autism, Alzheimer and Parkinson disease, heart disease and cancer. Understanding the mechanisms behind these multi-gene disorders has created the new field of genomic medicine.

Today, research into clinical human genetics is invariably an interdisciplinary exercise, bringing together clinicians from almost every medical discipline, and incorporating scientists with expertise in molecular biology, cell biology, biochemistry, and computer science. As a result of the incredible achievements and promises of genomic medicine, current NIH funding for multi-disciplinary research in genetics and genomics continues to be strong, despite the recent overall decline in NIH funding. In addition, there are more high impact journals with a genetics or genomics scope than ever before.

Like the field of human genetics, the University of Miami Miller School of Medicine is undergoing a period of dynamic expansion. Our aim is to hit the ground running with a state-of-the-art Department of Human Genetics that will identify disease-causing genes and networks of genes, investigate possible treatments, and redefine our understanding of medicine in the 21<sup>st</sup> century. We have successfully recruited two world leaders in human genetics and genomic medicine, Drs. Margaret A. Pericak-Vance, Jeffery M. Vance and their team. We are located in one of the most ethnically diverse areas of the United States; and we have a strong infrastructure that can support the rapid growth of a robust genetics and genomics research enterprise.

Simply put, we are in an extraordinary period of growth that is ideal for the establishment of a Department of Human Genetics and will position the University of Miami Miller School of Medicine as the leader in human genetics and genomics, education and service in Florida.

## 2. MISSION

The Department of Human Genetics is dedicated to excellence and innovation in research and education of physicians and research scientists in the field of human genetics and genomics.

The overarching aims of the Department are to provide an academic home for genetics and genomics at the University, to uncover the genetic contributions to disease, to apply these findings to better patient care, and to educate the physicians, geneticists and genomicists of tomorrow.

## 3. MARKET ANALYSIS

The potential establishment of a Department of Human Genetics at the University of Miami Miller School of Medicine needs to be examined with due consideration of our strengths and weaknesses, the opportunities that are currently open to us, and the challenges that we may face in the mid-term future.

### 3.1 Strengths

- We are the oldest and most established medical school in South Florida, serving a population of 7 million or more.
- We have a large group of clinicians and researchers who are experts in areas of clinical medicine where genomics is rapidly becoming important.
- With the recruitment of the Vances and their collaborators, we are set to have an unmatched human genetics and genomics presence in South Florida.
- The interdisciplinary nature of genetics would be heightened by offering faculty with research activities in human genetics and genomics secondary appointments in their clinical or basic science area of expertise.
- We have an accredited residency program in Medical Genetics and are home to the Pathway in Medical Genetics, the first of its kind, nationally recognized 4-Year program where medical students are exposed to Medical Genetics throughout their medical school curriculum. A proposal for a multidisciplinary PhD Program in human genetics and genomics is in the process of being developed for approval by the appropriate School and University committees.
- The Louis Calder Memorial Library has significant genetics/genomics journal subscriptions and book holdings.

### 3.2 Weaknesses

- We are one of the few top-level medical schools in the country that does not have a Department of Genetics. In 2006, nine of the top 10 medical schools by NIH funding have Departments of Genetics (Table 1) and approximately 50% of American Association of Universities (AAU) members have Departments of Genetics (Table 2).
- Researchers working in the areas of genetics and genomic medicine are spread throughout existing departments.

- Currently, geneticists and genomicists are not peer-reviewed for promotion and tenure by fellow geneticists.
- There is insufficient opportunity for the development of collaboration in genetics or genomics.

### **3.3 Opportunities**

- Under the leadership of Pascal Goldschmidt, the recently appointed Dean, a new vision for the Miller School of Medicine is being actualized. This is the time to build on our strengths and overcome our weaknesses. We are limited by not having an academic hub at the University for genetics and genomics research, but with the recruitment of a new team of world-renowned research geneticists, this is an ideal moment for the establishment of a Department of Human Genetics.

### **3.4 Challenges**

- Once a Department of Human Genetics has been established, we face the challenge of staying current with this fast changing field. To do this, we need to continue to recruit the best individuals in the field, offer unique collaborative opportunities, and maintain up-to-date training opportunities.
- In addition, we need to ensure that we continue to utilize the universality of genetics in medicine as a nucleus for collaboration among various investigators and disciplines, both within the University and beyond.
- Existing research geneticists and genomicists at the University of Miami Miller School of Medicine who are currently members of other departments may want to be included in the new department. We need to incorporate them as appropriate while maintaining their contributions to existing departments.

## **4. INITIAL DEVELOPMENT**

The new department will be called the Department of Human Genetics. It will have a Chairperson, several programs and a horizontal system of administrators, as outlined below.

### **4.1 Chairperson and Scope of Faculty**

The Department of Human Genetics will be led by an Interim Chairperson, Jeffrey M. Vance, MD, PhD. Dr. Vance is the Chief of the Division of Human Genetics, in the Department of Medicine and the Director of the Center for Molecular Genetics and Genomic Medicine in the provisional Miami Institute for Human Genomics. Dr. Vance is boarded in both the American Board of Psychiatry and Neurology and the American College of Medical Genetics as a board-certified PhD Medical Geneticist. Dr. Vance's primary areas of expertise and national recognition are in neurogenetics, especially in Parkinson disease and Charcot-Marie-Tooth Disease, and also in cardiovascular genetics, human genotyping and banking of DNA samples, and the molecular aspects of the positional cloning of human disease. After the Department is formalized and in accordance with the Faculty Manual, the departmental faculty will serve as the Consultative Committee and advise the Dean on the appointment of the Department Chair.

The Department of Human Genetics will initially be comprised of 17 faculty members. The faculty intellect and talents represent the broad scope of modern

human genetics, and include the areas of fundamental genetics, clinical expertise and specialization necessary for a well-rounded approach to uncovering the genetic components of common complex human diseases. The faculty contains PhDs, MDs and MD/PhDs. They have expertise ranging from molecular genetics to genetic epidemiology, utilizing approaches such as the mapping of Mendelian and complex diseases to multidisciplinary know-how like the integration of genomic and statistical technologies and their application to diseases. In addition, the faculty contains varied clinical expertise including licensed clinical psychologists and board-certified pediatricians, neurologists, internists, and psychiatrists.

In addition to the usual administrative positions for the day-to-day running of the Department and management of its extramural funding, there will be three dedicated administrators to function as grant writer, web educational content developer, and publicity/development coordinator.

#### **4.2 Programs**

The Department of Human Genetics will initially be organized into four programs as outlined below. Interaction and exchange of ideas and materials between the programs is encouraged, as is the establishment of collaborative projects with other departments at the University.

##### 4.2.1 Clinical Genetics

Genomic Medicine, the application of our rapidly expanding knowledge of the human genome to medical practice, will be a major focus of the clinical arm of the Department. Specifically, this program will focus on genetic and genomic findings as they relate to complex, common diseases as well as to our understanding of pharmacogenomics. The program will initially be structured as a consult service supporting all disciplines of medicine. A website designed to be an information resource for physicians will also be developed and made available to all medical personnel. The website will provide the real-time updates to information related to genomic medicine. In addition, the department will contain individuals practicing in the more traditional Medical Genetics programs as well.

##### 4.2.2 Genomic Research Program

The Genomic Research Program will lead in the identification of genes and gene networks that cause disease. Using cutting-edge technology and innovative approaches, this program will work to discover the many genetic risk factors that affect susceptibility and prognosis for common, complex human disorders such as cardiovascular disease, autism and Parkinson's disease.

##### 4.2.3 Biorepository And Clinical Laboratories

A state-of-the-art DNA and tissue bank is now functional at the University of Miami Miller School of Medicine and will be housed within the Department of Human Genetics and the provisional Miami Institute of Human Genomics. The Biorepository will be the primary DNA Bank for the Miller School of Medicine and will have separate clinical and research banks, with the relevant documentation for consent, curation and management of each. The clinical laboratories currently located in the Dr. John T. McDonald Center will be incorporated into the new genetics department.

##### 4.2.4 Education and Outreach Program

The Department will eventually offer a number of education and outreach programs. Once faculty and staff are in place, each initiative will be designed in more detail and

proposals will be brought before the appropriate School and University committees according to the Faculty Manual.

Faculty from the Department of Human Genetics will be expected to seek membership in graduate programs and to act as mentors and supervisors to graduate students. In addition, a PhD program in human genetics and genomics is under development. There will be didactic teaching responsibilities both to medical and graduate students as well as undergraduates throughout the University.

An outreach program will expand the educational materials on our website and instigate interactions with the local community, including underserved and minority-serving schools.

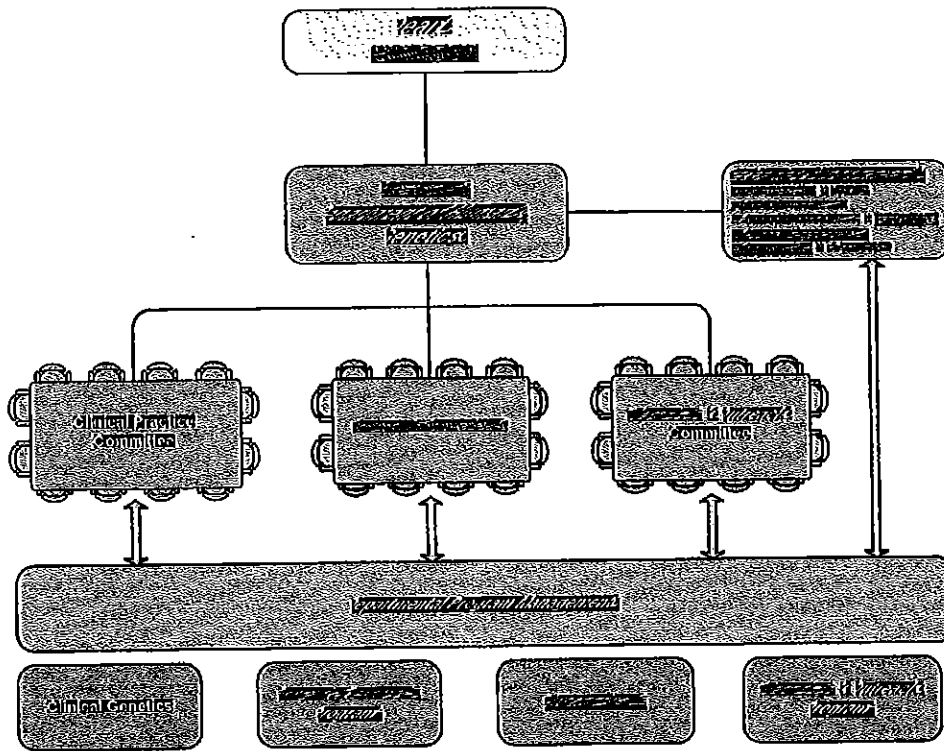
#### **4.3 Space**

The research activities of the Department of Human Genetics will require well-equipped wet and dry (analytical) laboratory along with administrative space. Initially the Department will occupy space at both South Campus and the Clinical Research Building on the Medical Campus. Once the Multidisciplinary Research Building is completed (anticipated in 2008), the Department will occupy space in this new facility.

The Department's clinical activities will be conducted in UMHC/SCCC clinical space.

**5. ORGANIZATION**

The Department will be organized along traditional lines with the usual complement of committees that enable faculty to have a significant impact on the day-to-day operations and considerable input to the strategic direction of the Department within the established plan for the Miller School of Medicine and the University.



**6. SOURCES OF FUNDING**

The Department will support its activities through a variety of mechanisms. As in other research-intensive departments, Faculty members are expected to compete for grants and contracts. Current annualized extramural funding for the Initial Departmental faculty is approximately \$6.3 million (direct costs only).

Additional funds will be supplied by the Miller School of Medicine to support faculty research efforts, faculty recruiting, and departmental operations. The annual School allocation is anticipated to be approximately \$2-3 million, in line with that of other research-intensive departments at the School.

The existing Financial Records System, Budget Preparation System, Sponsored Programs and Medical Finance reporting tools (DMAS, Dolfin, etc) will be used for accounting and management information systems in order to provide the highest quality of financial control in full compliance with all University standards.

**7. SUMMARY**

We propose the establishment of a Department of Human Genetics at the University of Miami Miller School of Medicine. Its establishment addresses a longstanding gap at the School in that we are one of the very few top level medical schools that do not have a human genetics department. Our recent recruiting efforts combine with our existing strengths in human genetics and genomics to position us for rapid expansion and afford the opportunity create a world-class environment for research and education in human genetics and genomics. By establishing a Department of Human Genetics, we would be sending an important message to local, regional, national and international scientists, prospective patients, clients and students, as well as to funding agencies and philanthropists that we are firmly committed to the development of the field of genetics and genomic medicine. Furthermore, the creation of the Department would create a home for genetics and genomics research at the University and allow us to make a significant impact on clinical practices and human health by investigating diseases at the genetic level, by providing genetics services to the community, and by educating the physicians, geneticists and genomicists of tomorrow.

## 8. Appendix

Table 1. Top ten NIH-funded medical schools in the country (FY 2005)

1. Johns Hopkins University - Dept of Molecular Biology and Genetics
2. University of Pennsylvania - Dept of Genetics
3. UC, San Francisco - Institute for Human Genetics
4. Washington University - Dept of Genetics
5. Duke University - Dept of Molecular Genetics and Microbiology
6. University of Washington - Dept of Genome Sciences
7. UC, Los Angeles - Dept of Human Genetics
8. Yale University - Dept of Genetics
9. University of Pittsburgh - Dept of Human Genetics
10. University of Michigan - Dept of Human Genetics

Table 2. American Association of Universities (AAU) Members with Departments of Genetics.

- Case Western Reserve University - Dept of Genetics
- Cornell University - Dept of Molecular Biology and Genetics
- Duke University - Dept of Molecular Genetics and Microbiology
- Emory University - Dept of Human Genetics
- Harvard University - Dept of Genetics; Dept of Genetics & Complex Diseases
- Indiana University - Dept of Medical & Molecular Genetics
- Johns Hopkins University - Dept of Molecular Biology and Genetics
- McGill University - Dept of Human Genetics
- Michigan State University - Dept of Microbiology and Molecular Genetics
- Penn State University - Dept of Genetics; Dept of Development & Health Genetics
- Rutgers University - Dept of Genetics
- Stanford University - Dept of Genetics
- Stony Brook University - Dept of Molecular Genetics & Microbiology
- Tulane University - Graduate Dept of Human Genetics
- UC, Berkeley - Dept of Genetics
- UC, Irvine - Dept of Microbiology and Molecular Genetics
- UCLA - Dept of Human Genetics
- University of Chicago - Dept of Human Genetics; Dept of Molecular Genetics and Cell Biology
- University of Florida - Dept Molecular Genetics & Microbiology
- University of Michigan - Dept of Human Genetics
- University of Minnesota - Dept of Genetics, Cell Biology and Development
- UNC Chapel Hill - Dept of Genetics
- University of Pennsylvania - Dept of Genetics
- University of Pittsburgh - Dept of Human Genetics
- University of Texas, Austin - Dept Molecular Genetics & Microbiology
- University of Toronto - Dept of Molecular and Medical Genetics
- University of Virginia - Dept of Biochemistry and Molecular Genetics
- University of Washington - Dept of Genome Sciences
- University of Wisconsin, Madison - Dept of Genetics
- Washington University - Dept of Genetics
- Yale University - Dept of Genetics



**General Welfare Committee**  
**November 14, 2007**  
**3:30 p.m.**  
**Law Library Conference room, 4<sup>th</sup> floor**

1. Chair's remarks (3:30)
2. #Review of Draft Minutes of October 31, 2007 (3:35)
3. #Ad Hoc Committee Report on Extension of Probationary Period for Tenure in the MSOM-  
Richard Williamson (3:40)
4. #Proposed Change in Charge of Budget and Compensation Committee – Steven Cantrell  
(4:20)
5. #Change in definition of Graduate Faculty – Stephen Sapp (4:35)
6. #Proposed language on revision of statement on Academic Freedom for section C8 in the  
Faculty Manual – Mary Coombs (4:50)
7. #Proposal for the creation of the Department of Human Genetics at the Miller School of  
Medicine – Jennifer McCafferty-Cepero, Assistant Dean for Research (5:00)
8. #Review of McLamore Outstanding Service Award nominations (5:05)
9. Other matters

\*\*\*\*\*  
# related material included

**MILLER**  
SCHOOL OF MEDICINE

To: Iris Barrios  
Secretary of the Faculty Senate

From: Marc Lippman, M.D. *ML*  
Chairman, Department of Medicine

Date: October 15, 2007

Subject: Support for the Department of Human Genetics

I want to offer my endorsement for the creation of the Department of Human Genetics at the Miller School of Medicine.

The establishment of a Department of Human Genetics would not only establish an academic home for genetics and genomics research at the University, it would have a significant impact on clinical care by providing genetics services to the community and by educating future physicians and genetics scientists.

The new Department of Human Genetics is a critical addition to the Miller School of Medicine. I offer the full cooperation of the Department Medicine and look forward to establishing strong collaborations with the new Department of Human Genetics.



**MILLER**  
SCHOOL OF MEDICINE

Pascal J. Goldschmidt, M.D., FACC  
*Senior Vice President for Medical Affairs and Dean*  
*Chief Executive Officer, Miami Medicine*

Memorandum

To: Iris Barrios  
Secretary of the Faculty Senate

From: Pascal G. Goldschmidt, M.D. PJG  
Senior Vice President for Medical Affairs and Dean

Date: October 15, 2007

Subject: Support for the Department of Human Genetics

This memo is to express my vigorous support for the creation of the Department of Human Genetics at the Miller School of Medicine and to request the University of Miami Faculty Senate approve this important initiative.

The establishment of a Department of Human Genetics is a critical structural element in the School's strategic plan to strengthen our faculty and programs in human genetics and genomics. This new department would position the Miller School of Medicine for rapid expansion and afford the opportunity to create a world-class environment for research and education in human genetics and genomics. Importantly, the creation of the department would build an academic home for genetics and genomics research at the University and allow us to make a significant impact on clinical practices and human health by investigating diseases at the genetic level, by providing genetics services to the community, and by educating the physicians, geneticists and genomicists of tomorrow.

This department will be an important and timely addition to the Miller School of Medicine. The School is fully committed to the success of the Department of Human Genetics. I fully endorse its creation.



LEONARD M. MILLER SCHOOL OF MEDICINE  
Post Office Box 016099 (R-699) • Miami, Florida 33101  
Location: 1600 N.W. 10th Avenue, RMSB 1140 • Miami, Florida 33136  
305-243-6545 • Fax: 305-243-4888



**Proposal for the Establishment of a  
Department of Human Genetics  
at the University of Miami Miller School of Medicine**

**1. BACKGROUND**

The aim of this proposal is to establish a Department of Human Genetics at the University of Miami Miller School of Medicine and give it the momentum to quickly become one of the nation's leading programs in genetics and genomics research, service and education.

The field of genetics has grown more rapidly in recent years than any other area of medicine, especially since the completion of The Human Genome Project in 2003. It now goes far beyond the traditionally recognized single-gene disorders such as Huntington Disease, Sickle Cell Anemia, and Cystic Fibrosis to include complex conditions such as Autism, Alzheimer and Parkinson disease, heart disease and cancer. Understanding the mechanisms behind these multi-gene disorders has created the new field of genomic medicine.

Today, research into clinical human genetics is invariably an interdisciplinary exercise, bringing together clinicians from almost every medical discipline, and incorporating basic scientists with expertise in molecular biology, cell biology, biochemistry, and computer science. As a result of the incredible achievements and promises of genomic medicine, current NIH funding for multi-disciplinary research in genetics and genomics continues to be strong, despite the recent overall decline in NIH funding. In addition, there are more high impact journals with a genetics or genomics scope than ever before.

Like the field of human genetics, the University of Miami Miller School of Medicine is undergoing a period of dynamic expansion. Our aim is to hit the ground running with a state-of-the-art Department of Human Genetics that will identify disease-causing genes and networks of genes, investigate possible treatments, and redefine our understanding of medicine in the 21<sup>st</sup> century. We have successfully recruited two world leaders in human genetics and genomic medicine, Drs. Margaret A. Pericak-Vance, Jeffery M. Vance and their team. We are located in one of the most ethnically diverse areas of the United States; and we have a strong infrastructure that can support the rapid growth of a robust genetics and genomics research enterprise.

Simply put, we are in an extraordinary period of growth that is ideal for the establishment of a Department of Human Genetics and will position the University of Miami Miller School of Medicine as the leader in human genetics and genomics research, education and service in Florida.

## **2. MISSION**

The Department of Human Genetics is dedicated to excellence and innovation in research and education of physicians and research scientists in the field of human genetics and genomics.

The overarching aims of the Department are to provide an academic home for genetics and genomics research at the University, to uncover the genetic contributions to disease, to apply these findings to better patient care, and to educate the physicians, geneticists and genomicists of tomorrow.

## **3. MARKET ANALYSIS**

The potential establishment of a Department of Human Genetics at the University of Miami Miller School of Medicine needs to be examined with due consideration of our strengths and weaknesses, the opportunities that are currently open to us, and the challenges that we may face in the mid-term future.

### **3.1 Strengths**

- We are the oldest and most established medical school in South Florida, serving a population of 7 million or more.
- We have a large group of clinicians and researchers who are experts in areas of clinical medicine where genomics is rapidly becoming important.
- With the recruitment of the Vances and their collaborators, we are set to have an unmatched human genetics and genomics presence in South Florida.
- The establishment of the Miami Institute for Human Genomics (MIHG) provides a strong research growth interaction with the Department.
- The interdisciplinary nature of genetics would be heightened by offering faculty with research activities in human genetics and genomics secondary appointments in their clinical or basic science area of expertise.
- We have an accredited residency program in Medical Genetics and are home to the Pathway in Medical Genetics, the first of its kind, nationally recognized 4-Year program where medical students are exposed to Medical Genetics throughout their medical school curriculum. A proposal for a multidisciplinary PhD Program in human genetics and genomics is in the process of being developed for approval by the appropriate School and University committees.
- The Louis Calder Memorial Library has significant genetics/genomics journal subscriptions and book holdings.

### **3.2 Weaknesses**

- We are one of the few top level medical schools in the country that does not have a Department of Genetics.
- Researchers working in the areas of genetics and genomic medicine are spread throughout existing departments.

- Currently, geneticists and genomicists are not peer-reviewed for promotion and tenure by fellow geneticists.
- There is insufficient opportunity for the development of collaboration in genetics or genomics.

### **3.3 Opportunities**

- Under the leadership of Pascal Goldschmidt, the recently appointed Dean, a new vision for the Miller School of Medicine is being actualized. This is the time to build on our strengths and overcome our weaknesses. We are limited by not having an academic hub at the University for genetics and genomics research, but with the recruitment of a new team of world-renowned research geneticists, this is an ideal moment for the establishment of a Department of Human Genetics.

### **3.4 Challenges**

- Once a Department of Human Genetics has been established, we face the challenge of staying current with this fast changing field. To do this, we need to continue to recruit the best individuals in the field, offer unique collaborative opportunities, and maintain up-to-date training opportunities.
- In addition, we need to ensure that we continue to utilize the universality of genetics in medicine as a nucleus for collaboration among various investigators and disciplines, both within the University and beyond.
- Existing research geneticists and genomicists at the University of Miami Miller School of Medicine who are currently members of other departments may want to be included in the new department. We need to incorporate them as appropriate while maintaining their contributions to existing departments.

## **4. INITIAL DEVELOPMENT**

The new department will be called the Department of Human Genetics. It will have a Chairperson, several programs and a horizontal system of administrators, as outlined below. By virtue of the interdisciplinary nature of genetics, the Department will include a basic science/translational research intensive component as well as a clinical arm.

### **4.1 Personnel**

The initial faculty of the Department will comprise the recently recruited scientists from Duke University's Center for Human Genetics.

**Jeffery M. Vance, MD, PhD.** Chief of the Division of Human Genetics, Department of Medicine and Director of the Center for Molecular Genetics and Genomic Medicine in the MIHG, Dr. Vance is boarded in both the American Board of Psychiatry and Neurology and the American College of Medical Genetics as a board-certified PhD Medical Geneticist. Dr. Vance's primary areas of expertise and national recognition are in neurogenetics, especially in Parkinson disease and Charcot-Marie-Tooth Disease, and also in cardiovascular genetics, human genotyping and banking of DNA samples, and the molecular aspects of the positional cloning of human disease.

Dr. Vance will be designated as the Interim Department Chair. After the Department is formalized and in accordance with the Faculty Manual, the departmental faculty will serve as the Consultative Committee and advise the Dean on the appointment of the Department Chair.

**Margaret A. Pericak-Vance, PhD.** Director of the MIHG, Dr. Pericak-Vance is a founding fellow of the American College of Medical Genetics and a board-certified PhD medical geneticist. Dr. Pericak-Vance is a global leader in the genetics of common diseases. She excels at the integration of genomic and statistical technologies and their application to diseases of public health importance in general, and to neurologic diseases in particular. Her more than 400 peer-reviewed papers demonstrate outstanding productivity and establish important milestones in diseases that include tuberous sclerosis, the muscular dystrophies, amyotrophic lateral sclerosis (ALS), Parkinson disease (PD), multiple sclerosis (MS), autism, and Alzheimer disease (AD).

**Susan Blanton, PhD.** Dr. Blanton's primary research has been centered on the mapping of Mendelian and complex diseases such as deafness, retinal diseases, skeletal dysplasias, cleft lip/palate and club foot. She has also been involved in the development and implementation of genetic education materials for Federal and appellate level judges and science writers in an ELSI sponsored project. Her current research also involves determining the level of genetic knowledge and attitudes towards genetic testing among the deaf. Dr. Blanton is Associate Director of Communications and Compliance at the MIHG, Associate Professor of Medicine and Project coordinator for the Guilford Genomic Medical Initiative.

**Michael L. Cuccaro, PhD.** A licensed clinical psychologist, Dr. Cuccaro specializes in autism and related developmental disorders diagnosis and directs the clinical component of the MIHG Autism Collaborative Team. A primary research interest is the development of behavioral methods to construct and extend clinical phenotypes of individuals with neurodevelopmental disorders. His research has extended beyond autism and related disorders to disorders with overlapping clinical features such as language disorders, mental retardation, ADHD, trichotillomania, Tourette's disorder, and obsessive-compulsive disorder.

**John R. Gilbert, PhD.** Professor of Medicine and Director of the Center for Genome Technology at MIHG, Dr. Gilbert's research interests encompass the molecular genetics of autistic disorder, Alzheimer disease, age-related macular degeneration, and facioscapulohumeral muscular dystrophy. As a molecular biologist, his expertise is in gene analysis and characterization, positional cloning, mutation analysis, and animal models of human disorders.

**Deqiong Ma, PhD, MD.** Dr. Ma practiced for more than 5 years as a pediatrician and later trained as an epidemiologist. She has extensive research experience in both traditional and genetic epidemiological studies on childhood developmental diseases. Her research interest focuses on genetics of autism and Amyotrophic lateral sclerosis.

**Eden R. Martin, PhD.** Director of the Center for Genetic Epidemiology and Statistical Genetics at the MIHG and Professor of Medicine, Dr. Martin is a statistical geneticist whose expertise applies to the mapping genes for

complex diseases using linkage disequilibrium methods. Her research has focused on extensions of the transmission/disequilibrium test (TDT) for linkage and association studies in nuclear families. She developed the Pedigree Disequilibrium Test (PDT) for analysis of linkage disequilibrium in general pedigrees, and recently developed the APL test for haplotype analysis. In addition to methodological developments, Dr. Martin is involved in studies of several disorders, including Alzheimer disease, Parkinson disease, and multiple sclerosis.

**William K. Scott, PhD.** Professor of Medicine and Associate Director for Informatics in the MING, Dr. Scott is a genetic epidemiologist interested in the influence of genetic and environmental factors on infectious diseases and complex traits associated with aging. He directs studies of genetic susceptibility to tuberculosis and of longevity and successful aging in the Amish communities of Indiana and Ohio. Dr. Scott is currently involved in studies of environmental risk factors and gene-environment interactions in aging related traits such as Parkinson disease and age-related macular degeneration.

**Michael A. Slifer, MD, PhD.** Dr. Slifer is an Assistant Professor of Medicine and a psychiatrist who has extensive research experience in Alzheimer disease genetics. His research focuses on the molecular and clinical subphenotyping of genetically complex heterogeneous disorders.

**Gaofeng Wang, PhD.** Dr. Wang is an Assistant Professor at the MING and a highly trained neurobiologist whose research seeks to identify biomarkers for common complex diseases and to develop disease models for neurodegenerative disorders. Dr. Wang's work focuses on Parkinson disease and age-related macular degeneration.

**Liyong Wang, PhD.** Dr. Wang is a molecular biologist with broad training in mapping susceptibility genes for complex diseases. Her research thus far has focused on discovering novel susceptibility genes and pathways for coronary artery disease. She has research experience in high-throughput genotyping, genome mapping, positional cloning, transcriptional regulation of gene expression, and characterization of gene structure and function.

**Stephan Züchner, MD.** Dr. Züchner is a neurologist and molecular biologist with extensive experience in the mapping of Mendelian diseases and cloning of causal genes. His work on Charcot-Marie-Tooth disease has led to the recent identification of causal mutations for two types of CMT. Dr. Züchner's work focuses on molecular neurogenetics and psychiatric genetics.

After the Department has had a sufficient time to develop its infrastructure, current junior and senior geneticists from existing departments at the University of Miami Miller School of Medicine may be considered for appointment. Approval of new primary faculty will require consultation with the Dean and the relevant department chair.

In addition to the usual administrative positions for the day-to-day running of the Department and management of its extramural funding, there will be three dedicated administrators to function as grant writer, web educational content developer, and publicity/development coordinator.



## **4.2 Programs**

The Department of Human Genetics will initially be organized into four programs as outlined below. Interaction and exchange of ideas and materials between the programs is encouraged, as is the establishment of collaborative projects with other departments at the University.

### 4.2.1 Clinical Genetics

Genomic Medicine, the application of our rapidly expanding knowledge of the human genome to medical practice, will be a major focus of the clinical arm of the Department. Specifically, this program will focus on genetic and genomic findings as they relate to complex, common diseases as well as to our understanding of pharmacogenomics. The program will initially be structured as a consult service supporting all disciplines of medicine. A website designed to be an information resource for physicians will also be developed and made available to all medical personnel. The website will provide the real-time updates to information related to genomic medicine. A rotation for senior residents from all medical disciplines is planned and will increase exposure to the principles of genomic medicine. In addition, individuals involved in the more traditional field of Medical Genetics will also be part of the program, likely through joint appointments with the Department of Pediatrics.

### 4.2.2 Genomic Research Program

The Genomic Research Program will lead in the identification of genes and gene networks that cause disease. Using cutting-edge technology and innovative approaches, this program will work to discover the many genetic risk factors that affect susceptibility and prognosis for common, complex human disorders such as cardiovascular disease, autism and Parkinson's disease.

### 4.2.3 Biorepository

A state-of-the-art DNA and tissue bank is now functional at the University of Miami Miller School of Medicine and will be housed within the Department of Human Genetics and the MIHG. The Biorepository will be the primary DNA Bank for the Miller School of Medicine and will have separate clinical and research banks, with the relevant documentation for consent, curation and management of each.

### 4.2.4 Education and Outreach Program

The Department will offer a number of education and outreach programs. Once faculty and staff are in place, each initiative will be designed in more detail and proposals will be brought before the appropriate School and University committees according to the Faculty Manual. Here we provide an overview of current plan for education and outreach.

Faculty from the Department of Human Genetics will be expected to seek membership in graduate programs and to act as mentors and supervisors to graduate students. In addition, a PhD program in human genetics and genomics is under development. There will be didactic teaching responsibilities both to medical and graduate students as well as undergraduates throughout the University.

A Master's level training program in genetic counseling is being considered for nurses, nurse practitioners and physician assistants. Graduates would be able to provide genetic counseling for complex diseases in the primary care setting, thereby assuring genomic medicine will be incorporated into primary care practice. Given that there are only 1400 genetic counselors in the United States, only a small fraction of those are Spanish-speaking, and none that we know of are proficient in Creole, this program will address an unmet need at the regional and national levels.

An outreach program will expand the educational materials on our website and instigate interactions with the local community, including underserved and minority-serving schools.

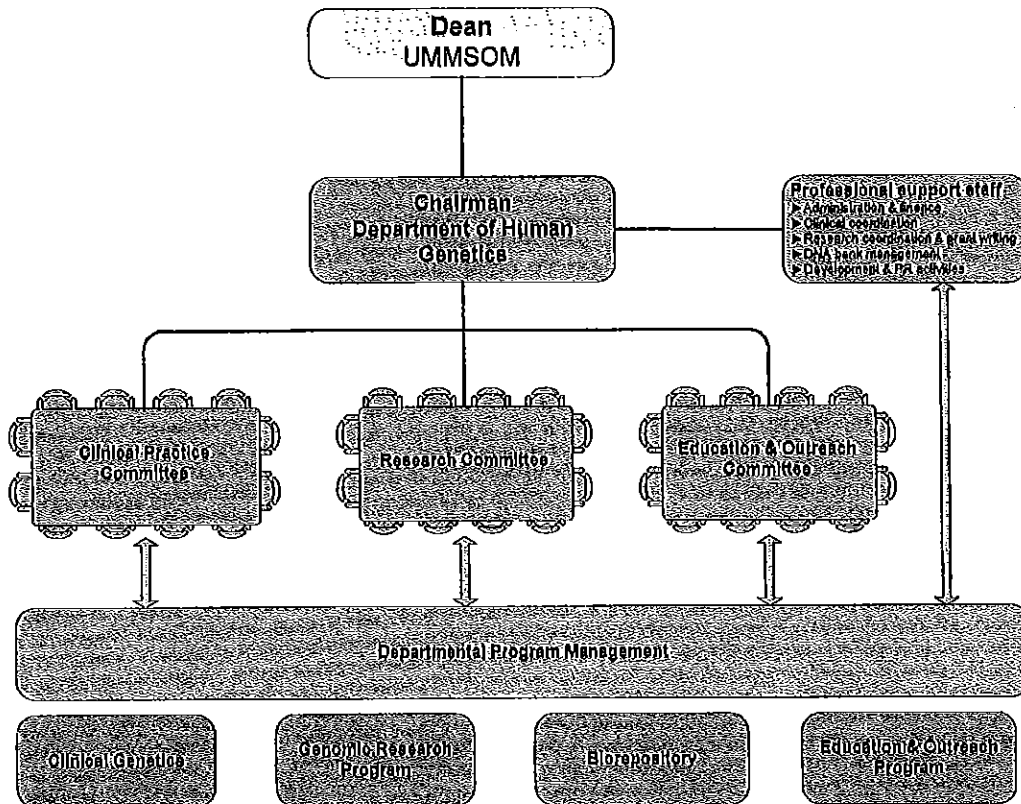
#### **4.3 Space**

The research activities of the Department of Human Genetics will require well-equipped wet lab space. Initially the Department will occupy space at both South Campus and the Clinical Research Building on the Medical Campus. Once the Multidisciplinary Research Building is completed (anticipated in 2008), the Department will occupy space in this new facility.

The Department's clinical activities will be conducted in UMHC/SCCC clinical space.

## 5. ORGANIZATION

The Department will be organized along traditional lines with the usual complement of committees that enable faculty to have a significant impact on the day-to-day operations and considerable input to the strategic direction of the Department within the established plan for the Miller School of Medicine and the University.



## 6. SOURCES OF FUNDING

The Department will support its activities through a variety of mechanisms. As in other research-intensive departments, Faculty members are expected to compete for grants and contracts. Current annualized extramural funding for the Initial Departmental faculty is approximately \$6.3 million (direct costs only).

Additional funds will be supplied by the Miller School of Medicine to support faculty research efforts, faculty recruiting, and departmental operations. The annual School allocation is anticipated to be approximately \$1-2 million, in line with that of other similar research-intensive departments at the School.

The existing Financial Records System, Budget Preparation System, Sponsored Programs and Medical Finance reporting tools (DMAS, Dolfin, etc) will be used for accounting and management information systems in order to provide the highest quality of financial control in full compliance with all University standards.

## **7. SUMMARY**

We propose the establishment of a Department of Human Genetics at the University of Miami Miller School of Medicine. Its establishment addresses a longstanding gap at the School in that we are one of the very few top level medical schools that do not have a human genetics department. Our recent recruiting efforts combine with our existing strengths in human genetics and genomics to position us for rapid expansion and afford the opportunity to create a world-class environment for research and education in human genetics and genomics. By establishing a Department of Human Genetics, we would be sending an important message to local, regional, national and international scientists, prospective patients, clients and students, as well as to funding agencies and philanthropists that we are firmly committed to the development of the field of genetics and genomic medicine. Furthermore, the creation of the Department would create a home for genetics and genomics research at the University and allow us to make a significant impact on clinical practices and human health by investigating diseases at the genetic level, by providing genetics services to the community, and by educating the physicians, geneticists and genomicists of tomorrow.