

*recruiting new faculty from
underrepresented groups in the health
sciences and supporting their successful
academic career advancement*

Faculty Diversity Scholars Program

2015-2016
Biannual Report

FDSP Oversight Committee

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Executive Summary

The University of Massachusetts Medical School's **Faculty Diversity Scholars Program (FDSP)** dates back to **1996** when a pilot Faculty Diversity Recruitment Incentive Program (FDRIP) was developed by the Council on Equal Opportunity and Diversity (CEOD) Subcommittee on Minority Faculty and Resident Recruitment and Retention (MFRRR) and at which time the goal was to support the institution's mission to maintain and support a diverse faculty in order to enrich the academic, educational and social environment of the medical school. Several updates were made to the Program, including:

- In 2004, the program was revised to better meet the academic and professional development needs of the scholars, including changes to the eligibility criteria
- In 2006, the program was revised to include a yearly evaluation of the Scholars' progress and the mentoring activities by members of its Oversight Committee
- Between 2010 to 2013, program bylaws and standardized processes were developed.

The current goal of the program is to recruit new faculty from underrepresented groups in the health sciences and to mentor and support their successful academic and career advancement, with the program supporting the missions of the School of Medicine, the Graduate School of Biomedical Sciences, and the Graduate School of Nursing to: (1) meet the health care needs of our increasingly diverse community and state, (2) broaden research programs to eliminate health disparities; and (3) enhance learning through diverse experiences and teaching opportunities.

Guided by the FDSP Oversight Committee and administered by Dr. Luanne E. Thorndyke, Vice Provost for Faculty Affairs, the FDSP currently supports five faculty members: **Asem H. Ali**, MBBS, Assistant Professor of Medicine; **David E. Chiriboga**, MD, MPH, Assistant Professor of Medicine; **Ana Luisa Maldonado-Contreras**, PhD, Instructor of Microbiology & Physiological Systems; **Paulo N. Martins**, MD, PhD, Assistant Professor of Surgery; and **Teresita Padilla-Benavides**, PhD, Instructor of Cell & Developmental Biology.

As the 2013-2014 Annual Report documents, the FDSP is a well-established program that has had effect on the University of Massachusetts Medical School and its mission. The Oversight Committee recommends the following changes to ensure the FDSP has impact both in terms of underrepresented groups in the health sciences and our culture:

- **Provide the opportunity for FDSP awards to be extended to five years with a total individual FDSP award of \$500,000**
- **Increase the number of scholars being supported each year from three to six, over the next five years**
- **Conduct a formal evaluation of the FDSP every two years**
- **Enhance the infrastructure to support diversity within UMMS**
- **Establish a formal channel for new tenure track lines with funding for qualified scholars**

Background and Context

The urgent need to achieve diversity in the biomedical workforce continues to plague our healthcare industry and nation. Racial and ethnic minorities comprise approximately 35% of the total population of the United States today and this proportion is expected to increase to 54% by 2050. In Worcester County, the geographic region that UMMS serves, racial and ethnic minorities comprise 31% of the population (2010 census). In contrast with this rampant increase in diversity of the U.S. population, the percentage of health care providers and scientists from racial and ethnic minority groups (Latino, African American and Native American) historically has been very small, increasing only modestly in recent years from 6.8 percent in 2000 to 8.0 percent in 2014.¹ A diverse workforce in the health care industry is needed in order to address successfully the current and future needs of racial and ethnic minorities in the nation. The University of Massachusetts Medical School (UMMS) has made longstanding efforts to increase the number of faculty from underrepresented groups, however the proportion of racial/ethnic minorities at UMMS continues to fall far short of mirroring that of the U.S. population.

A major concern regarding lack of diversity in the health sciences is that limited exposure to culture-related knowledge, attitudes and behaviors required to meet the health care needs of a diverse population is likely to produce biased training and treatment environments. . Faculty diversity offers wider perspectives for practice, research and teaching. Other concerns regarding lack of diversity include potential development of intolerance, as well as diminished capacity of the health care workforce to address disparities in health among racial/ethnic minorities. Faculty from underrepresented groups are more likely to practice and therefore take care of patients from diverse groups. Reports show that Black physicians were more likely to practice in areas where the proportion of Black residents was nearly five times as high as where other physicians practice. Likewise, Hispanic physicians worked in communities with twice the proportion of Hispanic residents when compared to their non-Hispanic colleagues. Therefore addressing the critical lack of minority faculty is a primary goal of the leadership of the UMMS, which is the only state medical school in the Commonwealth.

Analysis of historical data at UMMS shows that the number of Blacks/African Americans in any hiring pool has never exceeded 4% at any point in UMMS's history (1975-2012). Furthermore, the highest percentage (3.7%) occurred in the late 1970s and thereafter the percentage of faculty across all ranks in this ethnic group dropped to <1% and only recently has increased minimally to 2%.

¹ Guevara J.P.; Adanga E.; Avakame E.; Carthon M.B. Minority Faculty Development Programs and Underrepresented Minority Faculty Representation at US Medical Schools. JAMA. 2013;310(21):2297-2304

National Context

2012 Faculty by Race

Source: AAMC

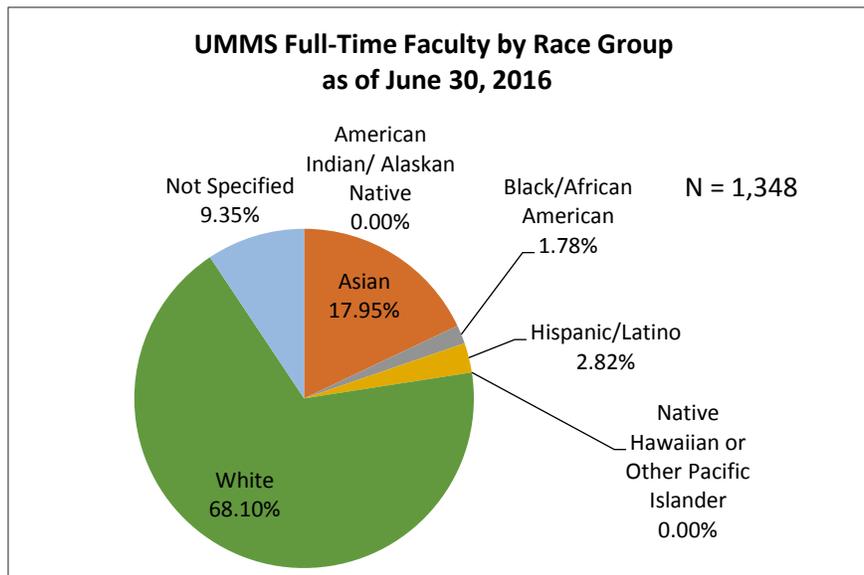
	African American/ Black
University of Maryland	5.55%
Johns Hopkins	3.58%
University of Texas Southwestern Medical Center	3.08%
University of Pennsylvania	2.40%
University of Iowa	1.94%
Boston University	1.83%
Harvard University	1.69%
University of Massachusetts Medical School	1.62%
University of Vermont	1.29%

The table to the left displays the percentage of African American/ Black faculty at eight comparative medical schools. Note that UMMS is among the schools with a low percentage of African American/ Black faculty.

As a state university, it is expected that UMMS faculty would be more diverse to better reflect the demographics of the population in Central Massachusetts/ New England.

Faculty Diversity at UMMS Needs to be Increased

The pie chart below reflects current faculty diversity at UMMS. Black/African American faculty comprise approximately 2% of UMMS full-time faculty (all ranks) and Hispanic/Latino faculty represent slightly less than 3%. This data was provided by UMMS Office of Faculty Affairs.



History of the Faculty Diversity Scholars Program (FDSP)

The conceptualization of the FDSP program dates back to **1996** when a pilot Faculty Diversity Recruitment Incentive Program (FDRIP) was developed by the Council on Equal Opportunity and Diversity (CEOD) Subcommittee on Minority Faculty and Resident Recruitment and Retention (MFRRR). The mission of the FDRIP was to support the institution's mission to maintain and support a diverse faculty in order to enrich the academic, educational and social environment of the medical school. The initial FDRIP focused on recruiting physicians and basic scientists with research interests who would be eligible for the tenure track. FDRIP funding support intended to assist the faculty member in developing a research project over a 3-year period, with the expectation that the faculty member would secure additional funding following the completion of the project at the end of the funding period. The program was initially administered by the interim Provost and Vice-Chancellor for Faculty Administration Dr. Cheryl Scheid, in collaboration with the MFRRR co-chairs Drs. Warren Ferguson and Danna Peterson, and two other faculty members.

Between 1996 and 2004, the FDRIP supported five faculty members:

FY 1997: **Samuel Abrokwah, MD** was recruited by the Department of Anesthesiology. After serving UMMS for two years, he left to work at New York University Langone Medical Center and continues to serve there as an Assistant Professor of Anesthesiology, Perioperative Care, and Pain Medicine.

FY 1998: **Joaquin Cortiella, MD, MPH** was recruited to the Department of Anesthesiology, conducting research in Dr. Vacanti's Tissue Engineering lab. After his 3 year FDRIP funding was up, he secured a Minority Research Fellowship grant for junior clinicians. During his time at UMMS he was involved in clinical anesthesiology, teaching and mentoring. He left after 4 years in 2001. He has continued his research at the University of Texas Medical Branch in Galveston and continues to serve there as an Associate Professor.

FY 1999: **Maria M. Garcia, MD, MPH** joined the Department of Medicine, division of General Internal Medicine. She completed 3 years of the FDRIP funding support. Dr. Garcia is an Associate Professor of Medicine and Family Medicine & Community Health. She also is an Assistant Dean for Student Affairs and Diversity and Associate Program Director of the Internal Medicine Residency program. Dr. Garcia holds appointments within Commonwealth Medicine as Medical Director for Clinical Pharmacy Services and Disability & Community Services. She is in the Division of Hospital Medicine and serves as Physician Advisor for Utilization and Care Coordination of UMass Memorial Medical Center.

FY 2000: **Ethel Gordon, PhD** was recruited by the Department of Medicine, conducting research in Dr. Aldo Rossini's lab as an Instructor. Dr. Gordon left UMMS in 2003 to take a position as Associate Professor of Molecular Biology at North Carolina Agricultural & Technical State University in Greensboro before taking a position at Salem State University as an Associate Professor of Biology.

FY 2003: **Abraham Ndiwane, EdD, RN, CHES** was recruited by the Graduate School of Nursing. He continued to serve the Graduate School, conducting teaching and research activities until he left in 2013. He currently serves as an Associate Professor of Nursing at the MGH Institute of Health Professions.

In 2004, the program was revised to better meet the academic and professional development needs of the scholars. Changes involved modifications to the eligibility criteria to include:

- Eligibility of faculty pursuing the physician educator model (physician educators and education research in addition to a research model)
- Requirement for protected time to pursue academic/scholarly work funded by the program
- Submission of a detailed professional mentoring plan
- Statement of specific departmental resources available to the candidate

Two additional scholars were funded under this version of the program:

FY 2004: **Chyke Doubeni, MD, MPH** was recruited by the Department of Family and Community Health. He served as a fellow in the Preventive Medicine Program in the Department of Medicine. He received a National Cancer Institute grant immediately after completing his FDSP tenure. He served as interim Associate Vice Provost for Diversity (AVPD) between 2009-2010, supporting the recruitment, retention and career advancement of faculty who are underrepresented in academic medicine by building external collaborative relationships. In 2011, Dr. Doubeni was promoted to Associate Professor. Later that year he was recognized by President Barack Obama as one of the country's rising scientific stars with a Presidential Early Career Award for Scientists and Engineers. He was recruited to the University of Pennsylvania (Penn) that same year and currently serves as the chair of the Department of Family Medicine and Community Health at the Perelman School of Medicine. Dr. **Doubeni** is a Senior Scholar in the Penn Center for Clinical Epidemiology and Biostatistics, and a Senior Fellow in both the Leonard Davis Institute of Health Economics and the Center for Public Health Initiatives. Dr. Doubeni also serves as diversity search advisor for the Department of Family Medicine and Community Health at Penn.

FY 2006: **Onesky Aupont, MD, MPH, MA, PhD** was recruited from Harvard in 2005 by the Department of Pediatrics in the Division of Clinical Research. In 2007, along with the Department Chair and Division Chief, Dr. Aupont led the development of the National Children Study Center Award at UMMS where he served as the Study Director until 2013. In the spirit of Diversity and Inclusion, in May 2007, he championed the organization of the Global Health Symposium within the University System which sought and highlighted the engagement of the UMASS Community in Global Health, Education, Services, and Research across the five campuses. Dr. Aupont was the Co-Principal Investigator of a NCS formative research study that sought to develop adaptive screening tools for parental mental health. He serves as the Medical Director of the Massachusetts Supra Reference Laboratory for TB, an entity of Commonwealth Medicine that provides technical assistance for capacity building, training, diagnosis, and management of Tuberculosis in resource-constrained environment.

In 2006, the FDSP came under the administration of Dr. Judith K. Ockene, Interim Vice Provost of Faculty Affairs. At that time the FDSP added an evaluation component. Accordingly, the program was revised to include a yearly evaluation of the Scholars' progress and the mentoring activities by members of its Oversight Committee. This evaluation involved a yearly 90-minute meeting involving presentations by the Scholar and his/her mentors regarding the Scholars' accomplishments and the mentoring and other support received during the preceding year.

In 2007, the FDRIP was re-named the Faculty Diversity Scholars Program (FDSP) and two additional faculty members were funded soon thereafter:

FY 2008: **Sonia Ortiz-Miranda, PhD** was recruited in 2005 as an Instructor in the Department of Physiology. The focus of her research is the release of transmitters from nerve terminals, with specific focus on alcohol, calcium channels and opioids. Dr. Ortiz-Miranda was promoted to Research Assistant Professor in 2009. She transitioned to voluntary status in 2012, returning to UMMS in 2015 as an employed faculty member in the Department of Microbiology and Physiological Systems.

FY 2009: **Ben Nwosu, MD** is an Associate Professor of Pediatrics at the University of Massachusetts Medical School in Worcester, Massachusetts, USA. He received his medical degree from the College of Medicine, University of Nigeria, where he now serves as a Visiting Lecturer. He completed his residency training in Pediatrics and Child Health at the Howard University Hospital in Washington DC, and obtained his fellowship training in Pediatric Endocrinology at the National Institutes of Health, in Bethesda, Maryland, USA. His research focus is on diabetes mellitus, obesity, growth hormone, and vitamin D

physiology. He is currently the principal investigator on a randomized, double-blind, placebo-controlled trial of the effects of adjunctive metformin therapy on glycemic control in children and adolescents with double diabetes. He serves as the Chair of the Personnel Action Committee of the Department of Pediatrics, UMMS, member of the Oversight Committee of the Faculty Scholars Diversity Program, UMMS, and is a member of the Communications Committee of the Society for Pediatric Research. He is a Review Editor at *Frontiers in Endocrinology*, sits on the Editorial Board of several scientific journals, and is an author and editor at *PREP Endocrinology of the American Academy of Pediatrics*.

In 2009-2010, the FDSP came under the administration of Dr. Chyke Doubeni, MD, MPH in his role as interim Associate Vice Provost for Diversity (AVPD) and

FY 2009: **Rashelle Hayes, PhD** was recruited by the Department of Medicine, Division of Preventive and Behavioral Medicine as an Instructor of Medicine and in 2010 was promoted to Assistant Professor. Her research interests are related to health behavior change and specifically tobacco control and cancer prevention. Her research as principal investigator spans topics related to the development and examination of smoking cessation treatment for underserved populations, implementing treatment in the context of teachable moments and augmenting risk perceptions and tailoring health communication messages to motivate cessation behavior, and developing and evaluating methods to train health care providers/medical students in implementing clinical guidelines in tobacco treatment. She also began developing expertise in population use of alternative tobacco products, tobacco regulatory science, and the use of behavioral counseling and technology to promote other health behavior changes such as weight management. Dr. Hayes also collaborated with other faculty in research related to obesity prevention and treatment, skin cancer prevention, and medical education. Dr. Hayes consults as a motivational interviewing network trainer (MINT) and is a licensed clinical psychologist. In July 2016 she left UMMS and retains a voluntary faculty appointment.

In 2010, the FDSP came under the administration of Dr. Luanne E. Thorndyke in her role as Vice Provost for Faculty Affairs. Between 2010 to 2013, the program was further enhanced through the development of bylaws and standardized processes. The primary goal of the program is to recruit new faculty from underrepresented groups in the health sciences and to mentor and support their successful academic and career advancement, with the program supporting the missions of the School of Medicine, the Graduate School of Biomedical Sciences, and the Graduate School of Nursing to: (1) meet the health care needs of our increasingly diverse community and state, (2) broaden research programs to eliminate health disparities; and (3)

enhance learning through diverse experiences and teaching opportunities. By-laws provided further clarification that African American and Hispanic/Latino(a) faculty are underrepresented groups in academic health sciences who specifically would benefit from the program.

Enhancements included:

- Revision of the Program Description Document (Appendix A)
- Creation of the Oversight Committee's Bylaws (Appendix B)
- Revision of the role of the FDSP Oversight Committee in relationship to the Scholars
- Increased expectation for departmental support of mentoring, protected time and resources
- Guidelines for announcement of funding opportunities
- Standardized application process and requirements (steps, forms/documents)
- A uniform process for evaluation of applicants by the FDSP Oversight Committee
- Guidelines for evaluation of progress of funded Scholars
- Revision of Oversight Committee Bylaws, including membership and member terms

In 2013, three scholars were funded through the Faculty Diversity Scholars Program:

FY 2013: **Stephanie Rodrigues, PhD** was recruited by the Department of Psychiatry as an Assistant Professor and Clinical Psychologist in the Division of Addiction. Dr. Rodrigues brought to UMass Medical School her research and clinical experience in the treatment of severe mental illness, addiction, and co-occurring disorders among general, veteran, and homeless populations. In particular, Dr. Rodrigues is interested in efforts to improve stigma reduction and the role of stigma in the treatment engagement of marginalized populations. To date, Dr. Rodrigues' research has addressed stigma related to co-occurring mental health and substance abuse disorders, depression, homelessness, and obesity. Dr. Rodrigues is also interested in the development, implementation, and evaluation of programs that target stigma reduction in order to promote recovery among individuals with mental health, addiction, and other stigmatizing conditions. As part of her Faculty Diversity Scholars Program award, Dr. Rodrigues worked with Dr. Pagato to build her expertise in obesity research, while incorporating her current expertise in stigma research to address stigma and maximize weight loss outcomes to improve quality of life in this population. Dr. Rodrigues was recruited to the Department of Veterans Affairs in Illinois as a Clinical Psychologist and will continue an academic affiliation with the University of Illinois in Urbana-Champaign and retain an adjunct Assistant Professor appointment with the Department of Psychiatry at UMMS.

FY2013: **Javier Gordon Ogembo, PhD** was recruited to the Department of Medicine as an Assistant Professor. His FDSP research is primarily focused on understanding the entry mechanisms of the two gamma-herpesviruses [Epstein-Barr virus (EBV) and Kaposi's sarcoma-associated herpesviruses (KSHV)] known to play a significant role in the pathogenesis of AIDS-defining malignancies Kaposi sarcoma (KS) and non-Hodgkin lymphoma (NHL). Due to the HIV/AIDS epidemic, NHL and KS have become the most common cancers in sub-Saharan Africa. Dr. Ogembo overall goal is to obtain new insights into the host-virus interaction, particularly identification of glycoproteins mediating viral entry. His primary goal is to translate these discoveries in the development of therapeutic and prophylactic drugs/vaccines. He is currently developing virus-like particle –based vaccines to protect against EBV and KSHV infections. In addition, Dr. Ogembo has a keen interest in global health, particularly understanding epidemiology of oncoviruses and assessing the acceptability, feasibility, and optimal delivery strategies of vaccines in sub-Saharan Africa. Dr. Ogembo was recruited as an Assistant Professor of Experimental Therapeutics to the Beckman Research Institute of City of Hope in Duarte, California.

FY2013: **B.Marie Ward, MD** was recruited to the Department of Surgery as an Assistant Professor in the Division of Surgical Oncology. Her research focuses on pleomorphic lobular carcinoma. Historically LCIS has not been considered a precursor lesion but rather a marker of increased risk. Patients with LCIS have an 8 to 9 times risk for the development of metachronous invasive breast cancer within 15 to 20 years (20-25% lifetime risk). Dr. Ward's current project is a retrospective study of patients diagnosed with pleomorphic lobular carcinoma in situ, and it will compare women diagnosed with CLCIS, PLCIS, DCIS as an isolated lesion and women with concurrent invasive disease.

The program continues to be administered by Dr. Luanne E. Thorndyke, Vice Provost for Faculty Affairs, and is guided by the FDSP Oversight Committee. The FDSP Oversight Committee is constituted by 11 voting members, including the Chair. Voting members include those appointed and ex-officio that hold specific leadership positions at UMMS. The Oversight Committee members and support include:

Appointed Members (Voting):

Vivian Budnik, PhD - *Provost Selection*

Sylvia Corvera, MD - *GSBS Representative*

Benjamin Nwosu, MD - *SOM Representative*

Kenneth Peterson PhD, MS, RN, FNP-BC - *GSN Representative*

Celia Schiffer, PhD - *Provost Selection*

Ex-officio Members (Voting):

Jeroan Allison, MD, MS – *CEOD Faculty Co-chair*

Jean King, PhD (*Chair*) – *Chief Research Officer designee*

José Lemos, PhD - *MAAC co-Chair*

Pranoti Mandrekar, PhD - *Mentoring Advisory Board Chair*

Judith K. Ockene, PhD, MEd, MA (*Vice Chair*) - *Associate Vice Provost designee*

Milagros Rosal, PhD - *Oversight Committee Past Chair*

Non-voting Members (Non-voting):

Jesse Edwards, Director for Diversity & Equal Opportunity, Diversity & Inclusion

Deborah Plummer, PhD, Vice Chancellor for Human Resources, Diversity & Inclusion

Luanne E. Thorndyke, MD, FACP, Vice Provost for Faculty Affairs

Faculty Affairs Support:

John Congdon, Administrative Manager for Faculty Affairs

Margie Rodriguez, Executive Assistant to the Vice Provost, Office of Faculty Affairs

Current Scholars

Asem H. Ali, MBBS

Assistant Professor of Medicine, Division of Diabetes; Diabetes Center of Excellence



Dr. Ali received his medical degree from Omdurman Islamic University in Sudan. He came to the United States in 2004. He engaged in research at the Mayo Clinic and the Harrington Cancer Center in Amarillo TX. Dr. Ali completed his Internal Medicine internship at New York Methodist Hospital, followed by Internal Medicine Residency at Texas Tech University Health Sciences Center. From 2008-2011 he was an Endocrinology fellow at the National Institutes of Health, NIDDK.

Dr. Ali studies why are certain underserved minority populations particularly vulnerable to obesity related diabetes. Dr. Ali 's research has been successful leading to 13 publications in the peer-reviewed literature and several abstract presentations at national and international meetings.

He is board certified in Internal Medicine and Endocrinology, Diabetes and Metabolism.

Primary Mentor: Dr. Sylvia Corvera

Other Mentors: Drs. Jeroan Allison; Laura Alonso; David Harlan; and Michael Thompson

Oversight Committee Representative: Dr. Milagros Rosal

David E. Chiriboga, MD, MPH

Assistant Professor of Medicine, Division of Cardiovascular Medicine



Dr. Chiriboga obtained his MD in medicine and surgery at Universidad Central del Ecuador Medical School and his postgraduate degrees in Preventive Medicine and Public Health at the University of Massachusetts Medical School and School of Public Health. He designed and implemented a comprehensive system to provide quality healthcare to the indigenous population of Zumbahua, in the highlands of the Ecuadorian Andes. The project included building a community hospital with financial support from Operazione Mato Grosso an Italian Catholic organization and the Ecuadorian Government and establishing a Health District with several satellite clinics. He worked for over a decade as a physician and as medical director of this hospital and its corresponding health district. He subsequently returned to UMMS as a faculty member in the Departments of Medicine, and Family and Community Medicine, where he had the opportunity to engage in academic activities and research, with over 30 scientific publications.

In 2008 he was invited to return to Ecuador as senior health policy advisor for the Ministry of Social Development Coordination and subsequently was asked to serve as Minister of Public Health of Ecuador (MOH). Dr. Chiriboga also served as President of the Council of Ministers of Health for the Union of South American Nations (UNASUR). His role as President included support for the creation of the South American Institute for Health Governance (ISAGS) in Rio de Janeiro, the establishment of a 5-year regional plan towards universal health care in the region, and successful positioning and approval of key draft resolutions to the World Health Assembly regarding R&D for drugs to treat neglected diseases, as well as policies to support access to generic medicines. Representing Ecuador, he acted as Vice-president of the 63rd World Health Assembly and was also a member of the Executive Board of World Health Organization.

His career has spanned from working in the field at the local level with underserved populations living in conditions of extreme poverty, to the national, regional and international arenas. It has also shifted from clinical and surgical work with individual patients to broader issues of public health, research and health policy as an instrument to bring about change by improving the delivery of healthcare services for populations and affecting the social determinants of health.

Primary Mentor: Dr. Ira Ockene

Other Mentors: Drs. Juan Garay and Robert Goldberg

Oversight Committee Representative: Dr. José Lemos

Ana Luisa Maldonado-Contreras, PhD

Instructor of Microbiology & Physiological Systems



Dr. Maldonado-Contreras Dr. Maldonado-Contreras obtained her Ph.D. from the University of Puerto Rico and completed a postdoctoral fellow here at UMMS in the Department of Microbiology & Physiological Systems. Her thesis and postdoc research have led her to develop considerable expertise in the human microbiome, and she is a co-founder of the new Center for Microbiome Research at UMMS. Further, she is one of the co-founders of Worcester's Science Café Woo, a monthly coffee-house session that educates the lay public about diverse scientific subjects.

Dr. Maldonado-Contreras is gaining an understanding of the mechanisms exploited by the gut microbiome to control immune responses in Inflammatory Bowel Diseases.

Primary Mentor: Dr. Beth McCormick

Other Mentors: Drs. Larry Stern; Barbara Olendzki; Kate Fitzgerald; and Milagros Rosal

Oversight Committee Representative: Dr. Sylvia Corvera

Paulo N. Martins, MD, PhD

Assistant Professor of Surgery



Dr. Martins received his medical doctorate and surgical residency from the Universidade Federal Da Bahia, Bahia, Brazil. He received his research doctorate in transplant immunology from the University of Berlin-Germany with summa cum laude and later completed a research fellowship at Harvard University. He completed an advanced fellowship in Hepatobiliary and Transplant Surgery at the Westchester Medical Center-New York Medical College and fellowship in transplant surgery at the Massachusetts General Hospital, Harvard Medical School. He later joined the faculty at Harvard University as an Instructor of Surgery, working at the Massachusetts General Hospital.

In 2013 Dr. Martins joined the University of Massachusetts Medical School as an Assistant Professor and Transplant Surgeon in the Department of Surgery's Division of Transplantation. Dr. Martins brought to UMass Medical School his interest is on transplant immunobiology, especially on Ischemia Reperfusion Injury, and organ preservation and established a lab. Clinically, his interest is on Transplant Outcome Research, specifically on the use of Extended Criteria Donors. In particular, Dr. Martins is working to develop ways to improve the quality of marginal liver grafts before transplantation to expand the organ donor pool.

As part of his Faculty Diversity Scholars Program award, Dr. Martins has been researching biliary ischemia reperfusion injury by machine preservation. His goal is to optimize ischemic liver grafts with normothermic machine preservation which is anticipated to have major clinical impact, and may even change current clinical practice with the potential to reduce morbidity and mortality of many patients with end-stage liver disease.

Primary Mentor: Dr. Timothy Kowalik

Other Mentors: Drs. Adel Bozorgzadeh; and Korkut Uygun

Oversight Committee Representative: Dr. Pranoti Mandrekar

Teresita Padilla-Benavides, PhD

Instructor of Cell & Developmental Biology



Dr. Padilla-Benavides received a Master's in Cell Biology and a PhD in Cell and Molecular Physiology from Centro de Investigación y de Estudios Avanzados del Instituto Politecnico Nacional in Mexico City, Mexico. After obtaining her PhD, she moved to the U.S. to work as a post-doctoral fellow studying heavy metal ATPases and metal homeostasis in the laboratory of Dr. Jose M. Argüello at Worcester Polytechnic Institute in Worcester, MA. In 2014, Dr. Padilla-Benavides came to UMMS as a post-doctoral fellow in Dr. Imbalzano's laboratory to learn tissue differentiation, signal transduction and chromatin remodeling.

Dr. Padilla-Benavides studies the role of transition metals and transition metal transporters in differentiation and developmental processes.

Primary Mentor: Dr. Jaime Rivera-Pérez

Other Mentors: Drs. Anthony Imbalzano; Jose Argüello; Roger Craig; Jeanne Lawrence; and Harvey Florman

Oversight Committee Representative: Dr. Jeroan Allison

Survey of Scholars

The FDSP Oversight Committee conducted a survey (Appendix C) in April 2014 of the former and current scholars, seeking to evaluate the Program's effectiveness and impact on their career advancement. The brief survey was separated into two segments.

The first section measured the scholar's opinion whether specific statements rated between 'Strongly Agree' to 'Strongly Disagree' on a five-point scale. The questions included:

1. I found the FDSP helpful for my career development
2. FDSP helped me make progress towards my defined goals
3. FDSP helped me acquire new knowledge and skills
4. I was satisfied with the effectiveness of my FDSP mentor
5. I maintained contact with my FDSP mentor even after the program ended
6. The time my mentor allotted to mentor me was adequate

The second section focused on written responses to four questions:

7. What part of your participation in the FDSP program was particularly helpful to you?
8. What aspects of the FDSP program did not work as well as you would have liked?
9. The Program has been revised over the years in an effort to improve the way in which it supports scholars and mentors. What improvements would you suggest for the program, based on your experience with it?
10. Would you recommend the FDSP program to other faculty, and why?

Responses were kept confidential; responses were used in aggregate or otherwise de-identified where written responses were provided.

Please refer to Appendix D for results of the survey.

Support of Scholars

Framework

The FDSP resources are distributed over a period of 3 years having a budget of up to \$300,000.00 per scholar. The FDSP funds salary support (typically between 50-75%) to leverage existing departmental and/or programmatic resources. Other allowable expenses include research startup costs, supplies and equipment, lab personnel (i.e., graduate students, post-doctoral fellows), loan support, travel for conferences/professional activities, and professional coaching. FDSP funds may not be used to support clinical effort or research effort funded by other projects. However, funds may be used to “buy out” or offset clinical or research effort to support the scholar’s own research or educational scholarship.

Scholars are expected to apply for external funding during the period of the FDSP award. Scholars who are successful in securing external support may use allocated FDSP funds for additional research activities, personnel, or professional development activities consistent with the goals of FDSP. This may include support for gaps in funding; however, FDSP funds may not be saved beyond 5 years of the end of the original funding period.

Current Support

The FDSP continues to provide \$300,000 per scholar award over a three-year period.

Recommendations

Recommendation 1

Provide the opportunity for FDSP awards to be extended to five years with a total individual FDSP award of \$500,000

Less than 50% of the tenure-track faculty receives extramural funding \geq \$100,000 within three years of hiring (see Analysis Summary, Appendix E). Thus, it is unrealistic to expect FDSP scholars to receive this level of extramural funding at the end of three years while having fewer financial resources.

Recommendation 2

Increase the number of scholars being supported each year from three to six, over the next five years

Historical data at UMMS shows that the number of Blacks/African Americans in any hiring pool has never exceeded 4% at any point in UMMS's history (1975-2012). Our total current minority pool at UMMS is approximately 5%. This is far lower than other medical schools we are benchmarked against.

After nearly two decades, the FDSP has helped maintain our current minority representation, given attrition. Expanding the number of FDSP Scholars could contribute to the UMMS mission to increase faculty diversity.

Recommendation 3

Conduct a formal evaluation of the FDSP every two years

The goal of this evaluation is to assess performance of the FDSP in terms of three important benchmarks: recruiting qualified faculty of diverse backgrounds, supporting career advancement of FDSP scholars and building an infrastructure to support diversity within UMMS.

The evaluation will include, but not be limited to, each of the following areas:

1. Support institutional efforts to recruit qualified candidates of diverse backgrounds
 - a. Number of inquiries about potential candidates
 - b. Number of applications
 - c. Number of different departments submitting applicants for review
2. Support career advancement of scholars
 - a. Academic promotion
 - b. Recognition through awards, national office, editorial reviewer

- c. Scholarship (grants, publications, invited presentations)
- d. Research productivity (grants submitted and funded)
- e. External review participation (Editorial Boards, Grant Review Committees)
- f. Protected time for scholarly activities

Recommendation 4

Enhance the infrastructure to support diversity within UMMS

- a. Increase opportunities to network and make connections
- b. Establish effective mentoring relationship(s)
- c. Enhance commitment by department(s) as demonstrated by financial support for professional development, participation on mentoring team, and sustained, periodic feedback and support

Please refer to Appendix F for a detailed proposal for evaluating the FDSP.

Recommendation 5

Establish a formal channel for new tenure track lines with funding for qualified scholars

Empower the Oversight Committee to recommend that the Dean appoint an academically prepared and exceptional scholar to the tenure track. Such a recommendation would be based on the committee's assessment that academic progress has been outstanding over the duration of their award period and that the scholar has a very high probability of successfully meeting tenure goals in a timely manner. The request would come within the award period and would be supported by a structured package of materials, including brief recommendations from appropriate faculty members. The committee strongly holds that this process will be critical for our institution to retain its most highly talented junior faculty from underrepresented groups who have established a rapidly emerging career trajectory.

UNIVERSITY OF MASSACHUSETTS WORCESTER**FACULTY DIVERSITY SCHOLARS PROGRAM****Purpose**

The primary goal of the **Faculty Diversity Scholars Program (FDSP)** is to recruit new faculty from underrepresented groups in the health sciences and to support their successful academic career advancement. In order to address departments with minority underutilization, African American and Hispanic/Latino(a) faculty are among the underrepresented groups who specifically would benefit from this program.

Background

One of the most critical elements in the effort to diversify the health professions workforce is the recruitment and retention of underrepresented minorities as faculty. A widening body of evidence regarding the barriers to success for African American and Hispanic/Latino/a faculty entering careers in academic medicine suggests that programs such as the FDSP may diminish the negative impact of isolation, loneliness and stereotypes due to minority status, lack of positive role models as mentors, and low career satisfaction.

Diversity is inherent in the University of Massachusetts Worcester (UMW) mission and vision statements and is reinforced in the Institutional Diversity Plan. The FDSP serves as a catalyst for achieving the institution's goals for increasing the number of underrepresented groups and establishing an inclusive academic community. To that end, the FDSP is a program of the Office of Faculty Affairs in collaboration with the Diversity and Equal Opportunity Office through its Council of Equal Opportunity and Diversity (CEOD) and the Minority Academic Advancement Committee (MAAC). Oversight for the FDSP is accomplished through a representative committee of UMW stakeholders.

The goal of the FDSP for increasing representation in departments with underutilization is aligned with the UMW institutional affirmative action plan and, accordingly, seeks to increase the number of underrepresented minority faculty in the academic health sciences.

The FDSP helps advance UMW excellence in education, clinical care and research through advancing the goals of diversity and inclusion. Specifically, the FDSP supports the missions of the School of Medicine, the Graduate School of Biomedical Sciences, and the Graduate School of Nursing to: (1) meet the health care needs of our increasingly diverse community and state, (2) broaden research programs to eliminate health disparities; and (3) enhance learning through diverse experiences and teaching opportunities.

The resources and support provided through the program go beyond attracting and recruiting underrepresented faculty to our institution. The FDSP is designed to help underrepresented minority faculty thrive and successfully contribute to the institution's ultimate goal of ensuring high quality health care for all.

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Program Administration

The Vice Provost for Faculty Affairs (VPFA) serves as administrator of the Program. The FDSP Oversight Committee ensures that the program is meeting its goals through participating in the review of applications and the evaluation of the scholars' career advancement and mentoring goals. The committee also reviews and evaluates the overall program and goals.

Requests for information regarding funding availability and the development of applications should be directed to the VPFA. All applications are initially screened by the VPFA in conjunction with the FDSP Oversight Committee to determine eligibility. Completed applications undergo a peer-review process under the auspices of the FDSP Oversight Committee, which makes recommendations. Applications are reviewed by three members of the FDSP Oversight Committee. By agreement of the Committee, an external ad hoc reviewer may be invited to participate in the review of a specific application.

The application is presented and discussed by the entire committee at regular meetings. Rating criteria used by the Committee are appended to this document (Appendix I). The committee makes a final recommendation to the VPFA. A simple majority of the Oversight Committee members present is required for making a final recommendation on an application. Final funding decisions are made in consultation with the Provost, the VPFA, and the Vice Chancellor for Administration and Finance. Notice of program award or denial is issued by the Office of Faculty Affairs.

Resources

The FDSP is supported by the Provost's office in conjunction with the Office of Faculty Affairs. Departments may request resources distributed over a period of 3 years and a budget of up to \$300,000.00 per scholar.

The FDSP funds salary support (typically between 50-75%) to leverage existing departmental and/or programmatic resources. Other allowable expenses include research startup costs, supplies and equipment, lab personnel (i.e., graduate students, post-doctoral fellows), loan support, travel for conferences/professional activities, and professional coaching. FDSP funds may not be used to support clinical effort or research effort funded by other projects. However, funds may be used to "buy out" or offset clinical or research effort to support the scholar's own research or educational scholarship.

Scholars are expected to apply for external funding during the period of the FDSP award. Scholars who are successful in securing external support may use allocated FDSP funds for additional research activities, personnel, or professional development activities consistent with the goals of FDSP. This may include support for gaps in funding; however, FDSP funds may not be saved beyond 5 years of the end of the original funding period.

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Eligibility

1. Applicants must be individuals recruited for a benefitted UMW or UMass Memorial Medical Group faculty position with a UMW faculty appointment at or above the rank of Instructor in accordance with the academic personnel policies of the appropriate school.
2. Applicants must have between 50-75% of their FTE devoted to scholarly activity (i.e. scholarly research and writing, educational scholarship, curriculum development).
3. Applicants must be sponsored by their department.
4. Applicants must have a primary mentor and a mentoring team. The primary mentor must be a UMW faculty member different from the applicant's direct supervisor.
5. Applicants also will be screened for eligibility based on status of underutilization of an underrepresented group within the department or field.

Application Process and Requirements

In general and pending availability of funds, a call for applications will be made in the fall and spring of each year. Upon identifying a potential applicant, the Department Chair will contact the VPFA to discuss the applicant and the application process. After the discussions have occurred and opportunity has been determined, the Chair will submit the applicant's package including budget justification to the VPFA. An interview with the applicant, the mentor, and the Department Chair by three members of the FDSP Oversight Committee will be required as part of the application process.

The application package **must** include the following:

1. Updated Curriculum Vitae.
2. A Personal Statement from the applicant that describes his or her proposed career plan toward developing regional/national/international distinction including: direct teaching/educational plans; scholarly research and writing; and activities that enhance diversity (e.g. mentoring of students, service on school-based or campus-wide committees and community involvement). Document can be no longer than 1 page.
3. A Career Development Plan that addresses the specific needs and interests of the applicant. The plan should include: description of areas targeted for skills/knowledge development; name of the proposed mentor responsible for supervising the plan implementation; approximate timeline with benchmarks for achievement of plan goals and objectives; and description of sustainability of scholarly activities at the end of the program and potential funding sources. The Career Development Plan should be written by the applicant in conjunction with the mentor, and signed by both. Document can be no longer than 3 pages.
4. A Mentoring Plan that reflects sensitivity to issues that have historically created barriers to success for faculty from underrepresented minority groups. The plan should include: description of specific mentoring goals, objectives and strategies to be employed; name(s) of the main faculty mentor as well as other faculty that will comprise the mentoring team; frequency and intensity of mentoring to be provided; and approximate timeline for

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achievement of mentoring goals and objectives. The Mentoring Plan should be written by the applicant in conjunction with the mentor, and signed by both. Document can be no longer than 2 pages.

5. A Letter from the Department Chair or the Dean (if in a School without departments). A second letter from the Program or Center Director is required if the applicant is employed through a non-academic department/unit. The letter(s) should include: a description of specific departmental commitment and resources (e.g. support services, personnel, equipment and space) available to support the faculty position and documentation that the appointment is consistent with the appropriate academic personnel policies regarding the track and rank.
6. A Budget Justification with: 1) delineation of full funding requirements for the applicant over three years, including FDSP and department funding and amount of time allotted to develop scholarship activities; 2) a budget proposal submitted by the department which describes and justifies the amount of support requested. Applications should include the following template:

<ul style="list-style-type: none">• Year 1 ___% support up to \$___ per year less salary offsets for grants, contracts and clinical activity.• Year 2 ___% support up to \$___ per year less salary offsets for grants, contracts and clinical activity.• Year 3 ___% support up to \$___ per year less salary offsets for grants, contracts and clinical activity.
--
7. Three Letters of Recommendation at least one of which should be from an external evaluator.
8. Signatures by the applicant and the sponsoring Department Chair. By signing, the applicant and Chair document their commitment to the faculty member and support of their participation in the FDSP.

Follow up/Evaluation Process

Deans or department chairs who receive FDSP funding are required to submit semi-annual (or more frequent) written progress reports to the VPFA. Reports must document progress toward stated goals and objectives, including description of specific activities of the FDSP-supported faculty during the preceding six months (or quarter). The report must specifically address productivity regarding any training received, presentations, manuscripts, grants development, teaching, service activities, clinical responsibilities, conferences attended, new areas of expertise acquired, awards received, mentoring experiences and diversity activities. The report should also include specific information about challenges encountered and additional resources needed to attain career and mentoring goals.

In addition, the scholar, main mentor and departmental sponsor are required to meet with the VPFA at least semiannually or more frequently as needed. As part of this process, continuation of funding throughout the funding period will be contingent upon satisfactory progress towards the goals of the Scholar's faculty development and professional program. A copy of the report will be distributed to the Department Chair.

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Citations

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Cregler, L. L. , Clark, L. T. & Jackson, E. B. Jr. (1994) Careers in academic medicine and clinical practice for minorities: Opportunities and barriers. *Journal of Association of Academic Minority Physicians*, 5, 68-73.

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Appendix I: Criteria for Evaluating FDSP Applicants

Applicant

- Is the applicant from an underrepresented group in the health sciences and being hired by a department with underutilization?
- Does the applicant meet eligibility for the position for which he or she is being hired, including education, research, service (including clinical service) and related scholarly activity? Is the academic appointment consistent with the appropriate academic personnel policies regarding the track and rank?
- Is the applicant's prior training and academic experience appropriate for this award and is there evidence of academic achievement? Is the applicant's research, academic, and (if relevant) clinical record of high quality?
- Is the applicant committed to a career in academic medicine?
- Does the applicant have a high potential for becoming an accomplished member of the faculty and achieving regional, national recognition for his or her work?
- Do the letters of reference address the FDSP review criteria?

Career Development Plan

- Does the Career Development Plan have clear goals and objectives?
- Are the proposed academic/research questions, design, and methodology of significant scientific and technical merit? Is the proposed research feasible, innovative or have the potential to be innovative to support future grant applications?
- Are the goals and scope of the plan appropriate and feasible, when considered in the context of prior training/experience and the future stated training and objectives?
- Are there plans for developing/enhancing the applicant's skills to implement the proposed research objectives?
- Is the active/pending support for the proposed project appropriate and adequate?
- What is the likelihood that the program will contribute substantially to the professional development of the applicant and support their academic career advancement?
- Is the plan for monitoring and evaluating the applicant's progress adequate? Are there specific benchmarks to evaluate progress?
- Is there a plan for pursuing external sources of funding to sustain the applicant's scholarly work after the FDSP support ends?

Mentoring Plan

- Does the mentoring plan support the applicant's career objectives?
- Are the mentor's qualifications in the area of the proposed concentration appropriate?

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- Does the proposed mentor have previous experience in fostering the development of independent faculty? A track record of scholarly activity in an area appropriate for the potential scholar?
- Do the letters from the mentor and additional letters of recommendation adequately address the FDSP program criteria including the applicant's potential and his/her strengths and areas needing improvement?
- Is there adequate description of the quality and extent of the mentor's proposed role in providing guidance and advice to the applicant? Does the plan include a clear description of the frequency of meetings, intensity of mentorship, and strategies that will be implemented, and how other members of the mentorship team will coordinate their effort with the applicant's main mentor?

Departmental Commitment and Resources to the Applicant

- Is there clear commitment from the sponsoring department to ensure that a minimum of 50% of the applicant's effort will be devoted directly to the project described in the application, with the remaining percent effort being devoted to an appropriate balance of research, teaching, administrative, and clinical responsibilities?
- Is the departmental commitment to the career development of the applicant appropriately strong? (e.g. support services, personnel and space)
- Are the facilities, resources and training opportunities, including faculty capable of productive collaboration with the applicant adequate and appropriate?
- Is the environment for scientific and professional development of the applicant of high quality? Is there a track record of support for scientific and professional development of faculty in the department/division?
- Is there a description of how the department will oversee the implementation of the proposed Career Development and Mentoring plans?

Budget Justification

- Is the budget appropriate for proposed plan? Are items/resources included in the application clearly described in the budget justification?

**UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL
FACULTY DIVERSITY SCHOLARS PROGRAM (FDSP)**

OVERSIGHT COMMITTEE BYLAWS

I. PURPOSE

The primary goal of the **Faculty Diversity Scholars Program (FDSP)** is to recruit new faculty from underrepresented groups in the health sciences and to support their successful academic career advancement. In order to address departments with minority underutilization, African American and Hispanic/Latino(a) faculty are among the underrepresented groups who specifically would benefit from this program.

II. DUTIES

The FDSP is administered by the Office of Faculty Affairs. The Oversight Committee is responsible for implementing and evaluating the program. Responsibilities of the Committee include:

- A. Collaborate with the Vice Provost for Faculty Affairs and Chief Diversity Officer to determine potential applicant eligibility.
- B. Review applications, conduct applicant interviews and present assessment to the Committee. At least three committee members review each application. They meet with the candidate, proposed mentor and corresponding Department Chair. An external ad hoc reviewer may be invited to participate in the review process of a specific applicant at the discretion of and with the agreement of the Committee.
- C. Evaluate each application and make recommendations to the Vice Provost for Faculty Affairs.
- D. Monitor progress of scholars and their career development/mentoring plans through periodic meetings with the scholars and their mentors. Provide progress reports to the Oversight Committee twice per year, per scholar.
- E. Annually evaluate the program and submit a report to the Vice Provost for Faculty Affairs.

III. MEMBERSHIP

- A. Voting and Non-voting Members

The FDSP Oversight Committee will be constituted by 10 voting members, including the Chair. Voting members shall include those appointed and ex-officio that hold specific leadership positions.

Appointed members of the Committee will serve a two-year term and are eligible for one additional term. These members shall include:

- A faculty representative from each of the schools, selected by the Dean
- Two positions to be selected by the Provost on the recommendation of the Vice Provost for Faculty Affairs and the Chief Diversity Officer.

Ex-officio members are voting member of the Committee and shall serve for the duration of their leadership position. These members shall include:

- Associate Vice Provost designee
- Executive Vice Chancellor for Research or faculty designee
- Chair of the Mentoring Advisory Board
- Faculty co-chair of the CEOD or faculty designee
- Chair of the MAAC or faculty designee
- Last Past-Chair of the Oversight Committee

Non-voting members:

- Affirmative Action Officer
- Chief Diversity Officer
- Vice Provost for Faculty Affairs

B. Officers

At the beginning of each academic year, the voting members will elect a Chair and a Vice-Chair for a term of one-year. They will serve for one year, renewable twice for a maximum of a consecutive three-year term.

C. Responsibilities

Members are expected to:

- i. Attend the FDSP Oversight Committee monthly meetings. Members who will be absent from a meeting are responsible for notifying the Office of Faculty Affairs prior to the meeting. Such an absence will be considered an excused absence.
- ii. Participate in the evaluation of FDSP applicants (with the exception of situations when there is a perceived or actual conflict of interest with the applicant or department).
- iii. Oversee the progress of current scholars through periodic meetings with assigned scholars and their mentors. At each review, Committee members:
 - a. Assess progress toward the scholar's professional development goals (as stated in the scholar's Career Development Plan and Professional Mentoring Plan submitted at the time of application or as amended at a later time)

- b. Report on the scholar's status and overall progress at oversight committee meetings
 - c. Provide formal feedback to the scholar and the mentor on behalf of the Oversight Committee. Document the evaluation by means of the Scholar Evaluation Form (see appendix A).
 - d. Submit a final and complete Scholar Evaluation Form to the Office of the Vice-Provost of Faculty Affairs.
- iv. Monitor the academic progress and status of Emeritus scholars as part of the evaluation of the program.

IV. MEETINGS

Monthly FDSP Oversight Committee meetings are scheduled by the Office of Faculty Affairs. The main purpose of each meeting is to review the scholars' progress toward their career development goals. Committee members must submit additional agenda items for discussion at least a week prior to any given meeting. Minutes are taken at each meeting and distributed by a representative of the Office of Faculty Affairs within a week of the meeting.

V. REVIEW AND AMENDMENTS TO BYLAWS

The Committee will evaluate its Bylaws at least every two years. Amendments to this document shall require approval by two-thirds vote of appointed and ex-officio members.

VI. APPENDICES

Appendix 1. Candidate Evaluation Form

Appendix 2. Scholar Evaluation Template

Appendix 3. Objectives and Benchmarks for Program Evaluation

Overview

Thank you for taking the time to complete this brief survey regarding the University of Massachusetts Medical School's Faculty Diversity Scholars Program (FDSP). The FDSP Oversight Committee is seeking your input into the effectiveness and impact of the Program. Your responses will be confidential; responses will be used in aggregate or otherwise de-identified where written responses are provided.

The primary goal of the FDSP is to recruit new faculty (including the School of Medicine, Graduate School of Biomedical Sciences and the Graduate School of Nursing) from underrepresented groups in the health sciences and to support their successful academic career advancement.

*** 1. I found the FDSP helpful for my career development**

Strongly Agree

Agree

Somewhat Agree

Disagree

Strongly Disagree

*** 2. FDSP helped me make progress towards my defined goals**

Strongly Agree

Agree

Somewhat Agree

Disagree

Strongly Disagree

*** 3. FDSP helped me acquire new knowledge and skills**

Strongly Agree

Agree

Somewhat Agree

Disagree

Strongly Disagree

*** 4. I was satisfied with the effectiveness of my FDSP mentor**

Strongly Agree

Agree

Somewhat Agree

Disagree

Strongly Disagree

*** 5. I maintained contact with my FDSP mentor even after the program ended**

Strongly Agree

Agree

Somewhat Agree

Disagree

Strongly Disagree

*** 6. The time my mentor allotted to mentor me was adequate**

Strongly Agree

Agree

Somewhat Agree

Disagree

Strongly Disagree

7. What part of your participation in the FDSP program was particularly helpful to you?

8. What aspects of the FDSP program did not work as well as you would have liked?

9. The Program has been revised over the years in an effort to improve the way in which it supports scholars and mentors. What improvements would you suggest for the program, based on your experience with it?

10. Would you recommend the FDSP program to other faculty, and why?

Thank you for taking the time to complete this survey.

Faculty Diversity Scholars Program Survey



1. I found the FDSP helpful for my career development

	Strongly Agree	Agree	Somewhat Agree	Disagree	Strongly Disagree	Rating Average	Rating Count
	83.3% (5)	16.7% (1)	0.0% (0)	0.0% (0)	0.0% (0)	1.17	6
	answered question						6
	skipped question						0

2. FDSP helped me make progress towards my defined goals

	Strongly Agree	Agree	Somewhat Agree	Disagree	Strongly Disagree	Rating Average	Rating Count
	66.7% (4)	33.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	1.33	6
	answered question						6
	skipped question						0

3. FDSP helped me acquire new knowledge and skills

	Strongly Agree	Agree	Somewhat Agree	Disagree	Strongly Disagree	Rating Average	Rating Count
	66.7% (4)	16.7% (1)	16.7% (1)	0.0% (0)	0.0% (0)	1.50	6
	answered question						6
	skipped question						0

4. I was satisfied with the effectiveness of my FDSP mentor

	Strongly Agree	Agree	Somewhat Agree	Disagree	Strongly Disagree	Rating Average	Rating Count
	66.7% (4)	16.7% (1)	16.7% (1)	0.0% (0)	0.0% (0)	1.50	6
	answered question						6
	skipped question						0

5. I maintained contact with my FDSP mentor even after the program ended

	Strongly Agree	Agree	Somewhat Agree	Disagree	Strongly Disagree	Rating Average	Rating Count
	33.3% (2)	50.0% (3)	16.7% (1)	0.0% (0)	0.0% (0)	1.83	6
	answered question						6
	skipped question						0

6. The time my mentor allotted to mentor me was adequate

	Strongly Agree	Agree	Somewhat Agree	Disagree	Strongly Disagree	Rating Average	Rating Count
	50.0% (3)	33.3% (2)	16.7% (1)	0.0% (0)	0.0% (0)	1.67	6
	answered question						6
	skipped question						0

7. What part of your participation in the FDSP program was particularly helpful to you?

	Response Count
	6
	answered question
	6
	skipped question
	0

8. What aspects of the FDSP program did not work as well as you would have liked?

	Response Count
	6
answered question	6
skipped question	0

9. The Program has been revised over the years in an effort to improve the way in which it supports scholars and mentors. What improvements would you suggest for the program, based on your experience with it?

	Response Count
	5
answered question	5
skipped question	1

10. Would you recommend the FDSP program to other faculty, and why?

	Response Count
	6
answered question	6
skipped question	0

Page 3, Q7. What part of your participation in the FDSP program was particularly helpful to you?

1	Networking and meeting new fellow colleagues who really seemed invested in assisting me.	Apr 24, 2014 3:51 PM
2	Grant writing, conduct of research and and scholarhsip	Apr 17, 2014 11:02 PM
3	continuous contact/direction with mentor	Apr 15, 2014 10:38 AM
4	Funding	Apr 11, 2014 11:51 AM
5	The biannual review meetings with the oversight committe is very helpfu feedback for me as a junior investigator. It also provides time to bring all the mentors together in one room and have a candid discussion on the progress and challenges experienced by both mentors and mentee.	Apr 9, 2014 3:30 PM
6	Protected time and institutional support. The VPFA was also very supportive	Apr 8, 2014 2:38 PM

Page 3, Q8. What aspects of the FDSP program did not work as well as you would have liked?

1	None. I really have no complaints.	Apr 24, 2014 3:51 PM
2	The mentoring aspect wasn't clearly structured.	Apr 17, 2014 11:02 PM
3	lack of possibilities for outside funding	Apr 15, 2014 10:38 AM
4	Mentorship	Apr 11, 2014 11:51 AM
5	None	Apr 9, 2014 3:30 PM
6	Nothing in particular	Apr 8, 2014 2:38 PM

Page 3, Q9. The Program has been revised over the years in an effort to improve the way in which it supports scholars and mentors. What improvements would you suggest for the program, based on your experience with it?

1	I fortunately had someone connect me with folks to assist on my project and application. I don't know what I would have done without this person connecting me folks to assist me even through the application phase. I learned a tremendous amount during the application process. So I would suggest keep providing mentorship even to the applicants once interest is expressed. It was critical for me being a relative novice to academics and coming from a community hospital.	Apr 24, 2014 3:51 PM
2	A clear expectation of what the mentor should accomplish with the mentee.	Apr 17, 2014 11:02 PM
3	provide some assistance for grant writing /funding sources	Apr 15, 2014 10:38 AM
4	I am quite OK with it as it is.	Apr 9, 2014 3:30 PM
5	Tie support to productivity and include a component for retention	Apr 8, 2014 2:38 PM

Page 3, Q10. Would you recommend the FDSP program to other faculty, and why?

1	Asolutely! It is the jump start I needed. I really appreciate the people I have met because I'm in the FDSP. Also, I am learning needed skills required to conduct research.	Apr 24, 2014 3:51 PM
2	Yes, it helps the scholar define and refine his/her career goal(s).	Apr 17, 2014 11:02 PM
3	yes	Apr 15, 2014 10:38 AM
4	Yes, if there is a good match or placement within a supportive and successful research team	Apr 11, 2014 11:51 AM
5	Yes, I will highly recommend FDSP program to other faculty because it helped me refine my goals and provided me with the funds to pursue those goals.	Apr 9, 2014 3:30 PM
6	Yes, helps launch careers	Apr 8, 2014 2:38 PM

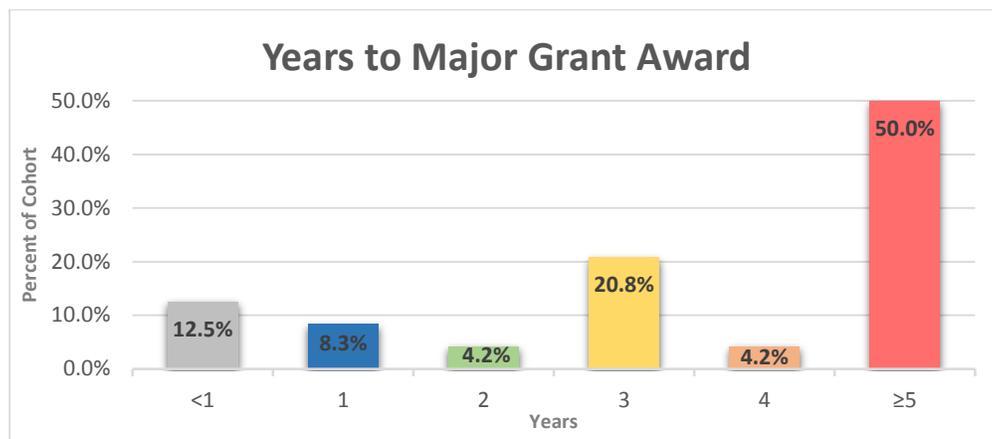
Analysis of Tenure Track Faculty Hires Productivity

Primary measures of faculty productivity include scholarly activities as well as acquiring extramural grant and contract support from the National Institutes of Health or other public and private entities. Thus, to understand UMMS faculty productivity, the FDSP Oversight Committee, in collaboration with the Office of Faculty Affairs, conducted an analysis of tenure-track Assistant Professors hired during a five-year period to summarize their scholarly productivity, including funding and scholarly activity. Specifically, the Committee wished to understand the average time faculty need at this stage in order to receive extramural awards in excess of \$100,000 in direct funding, as well as their average number of published manuscripts per year.

Data sources: Data regarding funding were obtained from the Office of Research annual reports, which includes dollars awarded for grants and contracts that were active during the fiscal year (July to June). Data regarding number of publications were retrieved from each individual's Faculty Profiles page. Profiles is a research networking and expertise mining software tool. Publications are added both automatically from PubMed and manually by faculty themselves. The number of publications between the times of each hire to June 30, 2013 were documented. A ratio of the number of publications to the total years of service was calculated.

Summary of Results: During the period between July 2008 and June 2013 (FY2009 to FY2013), 24 tenure-track faculty were hired at the assistant professor rank, including 4 women and 20 men, 4 basic science and 20 clinical. Of these 24 hires, two (~8%) are from underrepresented groups in the health sciences.

Results of the analysis revealed that only 11 of the 24 tenure-track assistant professors (45.8%) were able to secure extramural support in excess of \$100,000 of direct research funding within three years of hire. Stated conversely, 54.2% of assistant professors hired on the tenure track were not able to acquire extramural support for their research program within three years. Note, 12 of the 24 (50%) did not acquire extramural support for their research program within five years. The figure below illustrates the percentage of these faculty who were able to secure funding in excess of \$100,000 within five years of hire.



Results of the analysis of publications for these tenure-track assistant professors revealed that, on average, each tenure-track hire published two manuscripts each year.

University of Massachusetts Medical School

Tenure Track Hires Cohort Analysis of Years to Major Grant Award and Average Yearly Publications

AY2009 to AY2013

	< 1			1			2			3			4			> 5			Total (n)	Total Ave Pubs/Yr
	(n)	Ave Pubs/Yr	% Group	(n)	Ave Pubs/Yr	% Group	(n)	Ave Pubs/Yr	% Group	(n)	Ave Pubs/Yr	% Group	(n)	Ave Pubs/Yr	% Group	(n)	Ave Pubs/Yr	% Group		
Asian			0.00%			0.00%	1	1.51	16.67%	1	5.63	16.67%			0.00%	4	1.59	66.67%	6	2.25
Black/African American	1	1.59	100.00%			0.00%			0.00%			0.00%			0.00%			0.00%	1	1.59
Hispanic/Latino			0.00%			0.00%			0.00%			0.00%			0.00%	1	0.00	100.00%	1	0.00
White	2	0.77	12.50%	2	1.16	12.50%			0.00%	4	2.97	25.00%	1	0.42	6.25%	7	2.51	43.75%	16	2.11
Grand Total	3	1.04	12.50%	2	1.16	8.33%	1	1.51	4.17%	5	3.50	20.83%	1	0.42	4.17%	12	2.00	50.00%	24	2.03

20 March 2014

Evaluation of Past Faculty Diversity Scholars and the Success of the Program

Evaluation of the past Faculty Diversity Scholars (FDS) and the “success” of the program (FDSP) to determine if it met its objectives can be assessed on multiple levels using mixed methods (i.e. quantitative and qualitative measurement tools). An important outcome measure is success in meeting the program’s stated goal of “increased diversity of the faculty at UMMS”. To increase diversity the program objectives are “to recruit (and retain) new faculty from underrepresented groups in the health sciences and to support their successful academic career advancement” making recruitment, retention and promotion important primary outcomes. In addition, measures of grant productivity (submitted and funded), manuscript productivity (submitted and published) and clinical/service productivity and satisfaction with the program also are primary outcomes. We will assess secondary outcomes which have been far less developed and define the metrics to measure them at multiple levels using an evaluation framework developed by Kirkpatrick and Kirkpatrick¹ that assesses outcomes on four levels (see Table 1). Included in this framework are primary (1°) measures and secondary (2°) measures that are in development.

Table 1. Kirkpatrick Four-Level Model used for Faculty Diversity Scholars’ Evaluation

Level	Assessment	Individual/Organizational
1. Reaction	participation and satisfaction with the program and mentoring relationships (2°)	Individual (scholar)
2. Learning	acquisition of new knowledge, skills or attitudes by the scholar (2°)	Individual (scholar)
3. Behavior	translation of learning into practice (papers, grants clinical/service) (1°)	Individual & Organizational
4. Results	increased diversity of the faculty; impact on the organization (e.g. new pipeline programs, minority supplement grants; increase in institutional diversity efforts)	Organizational

The timing of the various assessments is depicted in Figure 1. Table 2 provides a framework of what is measured, how and when. A special software program, NVivo 10.0², will be used for data management and analyses of qualitative data from the key informant interviews to be conducted with each scholar who participated in the program. Using surveys and key informant interviews we will evaluate various components of the program (e.g. mentors, mentoring teams) to determine those that may have had a strong impact and those that may not have been as helpful. This information will be used to enhance the Faculty Diversity Scholars Program.

Figure 1. Sequence of Assessments

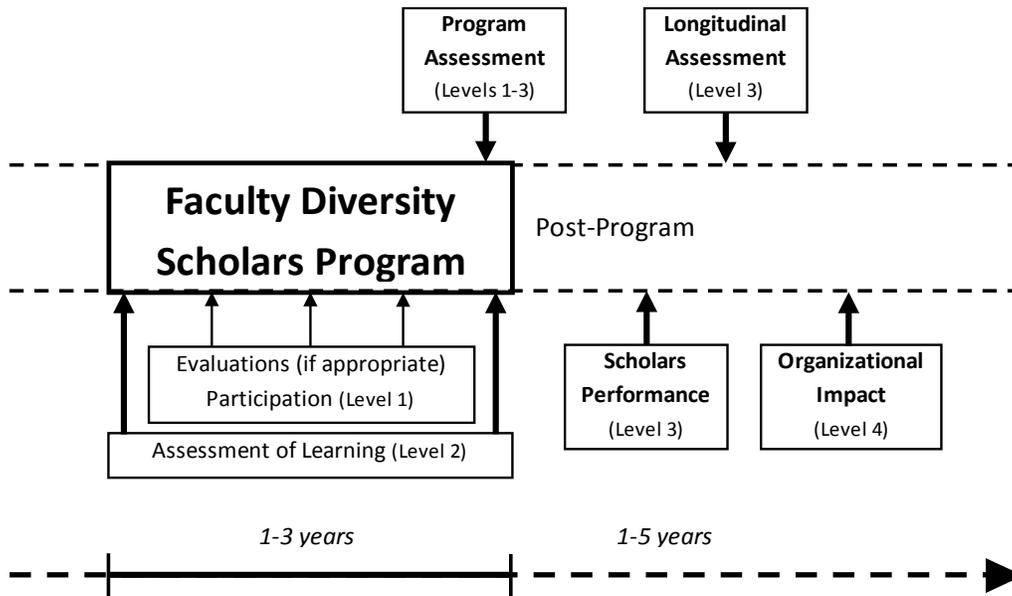


Table 2. Assessment at each level.

What is measured?	How measured?	When Measured?
Level 1. Reaction: <i>participation and satisfaction with the program</i>		
Participation: <ul style="list-style-type: none"> • maintenance of mentoring relationships (2°) 	<ul style="list-style-type: none"> • program tracking data 	<ul style="list-style-type: none"> • start & end of program (3 years)
Satisfaction with the Faculty Diversity Scholars Program <ul style="list-style-type: none"> • perceived usefulness, relevance (2°) • progress toward personal goals (2°) • frequency of meetings (2°) • strengths, weaknesses, improvements needed(2°) 	<ul style="list-style-type: none"> • quantitative & qualitative (key informant interviews) assessments: 	<ul style="list-style-type: none"> • end of program (3 years)
Effectiveness of mentors: <ul style="list-style-type: none"> • rating of mentors by scholars (2°) 	<ul style="list-style-type: none"> • mentor competency assessment 	<ul style="list-style-type: none"> • end of program (3 years)
Level 2. Learning: <i>acquisition of new knowledge, skills or attitudes by the scholar</i>		
Learning: <ul style="list-style-type: none"> • improvement in knowledge, skills, attitudes relevant to increase the goals of the program (promotion, funding) (2°) 	<ul style="list-style-type: none"> • quantitative & qualitative assessments: self-assessment of self-efficacy to succeed or advance • self report of skills learned through the program (key informant interviews) 	<ul style="list-style-type: none"> • start & end of program (3 years)

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Level 3. Behavior: <i>translation of learning into practice</i>		
Academic/professional achievement: primary outcomes (1°) <ul style="list-style-type: none"> • publications, presentations, grants (submitted, funded) • clinical/service • promotion, leadership positions • performance evaluation 	<ul style="list-style-type: none"> • quantitative & qualitative assessments: self-report of achievements • CV analysis 	<ul style="list-style-type: none"> • longitudinal study (3+ years)
Level 4. Results: <i>impact on the organization, society</i>		
<ul style="list-style-type: none"> • data on promotions, submissions and grant funding of the scholars and retention (1°) • meaningful contributions to UMMS and UMMHC (needs to be outlined) 	<ul style="list-style-type: none"> • longitudinal tracking data • measure of program objectives • meaningful contributions assessment 	<ul style="list-style-type: none"> • longitudinal study (3+ years)

Measured Primary Outcomes

- Publications/presentations
- Grants submitted/grants funded
- Clinical/service
- Promotions, leadership positions
- Performance evaluations
- Recognition awards
- Curriculum Vitae analysis

New Measures to be Used (descriptions are needed)

- Key informant interview
- Satisfaction survey
- Efficacy self assessment
- Mentor competency assessment
- Meaningful contributions assessment³

References

1. Kirkpatrick D & Kirkpatrick J. Transferring learning to behavior: Using the four levels to improve performance. San Francisco, CA. Ballett Kohler Publications: 2005
2. NVivo. NVivo Qualitative data analysis software. 10ed: QSR International Pty, Ltd.; 2013
3. Annual faculty diversity report efforts in APP