

K-State MPH Faculty Advisory Council Meeting Minutes
Location: Mara Center – 4th Floor Trotter
October 10 at 10:30 AM

Ct	Committee Member	Emphasis	In Attendance
1	Ellyn Mulcahy	MPH Director	X
	Stevenson, Barta	MPH Staff	Non Voting
	Open	MPH Student	
2	Hsu, Wei Wen	Core Instructor	X
3	Larson, Robert	Core Instructor	X
4	Sanderson, Michael	Core Instructor	
5	Gragg, Sara	FSB	
6	Kastner, Justin	FSB	X
7	Nutsch, Abbey	FSB	X
8	Cernicchiaro, Natalia	IDZ	
9	Nguyen, Annelise	Core Instructor + IDZ	X
10	Renter, David	IDZ	
11	Hanson, Jennifer	Core Instructor + PHN	
12	Rosenkranz, Ric	PHN	X
13	Rosenkranz, Sara	PHN	Rosenkranz Proxy
14	Irwin, Brandon	PHPA	
15	Mailey, Emily	PHPA	X
16	McElroy, Mary	Core Instructor + PHPA	

Dr. Mulcahy called the meeting to order at 10:38 AM. There was a quorum present.

1. **Approval of Minutes.** Minutes from the September 12, 2016 meeting were approved and will be posted as distributed.
2. **Program Director's Report.** Dr. Mulcahy briefly reviewed the Director's report (Attachment 1.)
3. **Items of Business.** The following items of business were reviewed and discussed as needed.
 - Final MPH Annual Progress Policy (Attachment 2) forwarded to Graduate School and is 2016-17 MPH Graduate Handbook.
 - Course and Curriculum review for PHPA (Attachment 3). The committee is unable to meeting on November 12 so another date and time will be chosen. The MPH Program Office will send the course syllabi for that they have on file for the review.
 - Use of the CPH Exam (Certification in Public Health) (Attachment 4) as an alternative to the presentation and defense of the field experience; as an avenue to help students complete their MPH that have left the university. After a brief discussion it was determined that more information needed to be collected about the process such as the role of the major professor and advisory committee, standard pass rate and retake process, how would the process work at K-State, etc.
 - MPH 840 Field Experience meeting (Attachment 5) scheduled for November 9 during the noon hour.
 - The MPH faculty application for was reviewed and accepted as a member of the MPH Graduate Faculty. Majid Jaber-Douraki, Assistant Professor, Institute of Computational Comparative Medicine and the Department of Mathematics (Attachment 6).
4. **Next Meeting:** The next scheduled meeting is November 14 in Union Rm 204.
5. **Adjourn:** The meeting was adjourned at 11:14 AM.

Attachment 1 – MPH Director's Report

1. MPH Program Statistics:

- a. MPH Graduates: total of 154 through Summer 2016, 5-year average of 21 per year (AY2012-2016) (KBOR standard is 5).
- b. Official enrollment: 73 in Fall 2016 (20th day), 5-year average of 74 (AY2013-2017, includes concurrent DVM/MPH students) (KBOR standard is 20).
- c. New Students: 21 for Fall 16 (16 degree students, 5 certificate students).
- d. Current students (progressing toward MPH degree): 104
 - Infectious Diseases/Zoonoses: 53
 - Public Health Nutrition: 14
 - Public Health Physical Activity: 12
 - Food Safety/Biosecurity: 7
 - Certificate 18

2. Annual Report to CEPH is due December 16. MPH Program office is gathering data for the report.

3. Routine programmatic assessment initiated September 16 for new students in the program and mid-cycle students.

4. Field Experience information:

Five year placements to date (AY 2012-2016): 104 with 44 different sites. Continuing issues include agreements (must be reviewed by KSU Office of General Counsel and agency lawyers, and liability insurance for students. This has slowed the process of placing students at Fort Riley Public Health Command and governmental agencies. Due to a Supreme Court ruling, state agencies cannot offer placements to students that are employed at KSU or have any type of assistantships due to "overtime" rule.

- a. Updating field experience procedure, documents for preceptor.
- b. MPH 840 Orientation scheduled for November 9 for students completing their field experience or planning a field experience.

5. Public Health Engagement by Program Director.

- a. Kansas Public Health Systems Group
- b. Kansas Public Health Workforce Development Coordinating Council
- c. Kansas Academic Public health department group
- d. Riley County Public Health Department Strategic Planning committee

6. MPH Grant proposals.

- a. KHF – 4 field experience placements
- b. USDA/NIFA - 6 MPH student stipends

Attachment 2 – MPH Graduate Student Annual Progress Tracking and Report Policy

Graduate Student Annual Progress Tracking and Report Policy

To assist students in progressing through the Master of Public Health (MPH) program in a timely manner the following tracking of graduate students is performed:

1. The MPH Program Office prepares a Student Progress Chart by looking up students in KSIS on or before the 20th day of enrollment each fall to determine if the student is enrolled and the number of hours completed. The report is shared with the Graduate Faculty Advisory committee.
2. If the student has completed the Program of Study (POS) within the first 12 months of MPH enrollment, the program considers that the student is on target and making adequate progress to complete the program in a timely manner. If the student has not completed the POS within the first 12 months the following communication is generated:
 - a. An e-mail to the initial advisor to determine if the student has contacted them and is progressing in the program.
 - b. An e-mail and/or phone call from the MPH Program Office to the student to determine the student's status.
 - c. The student will be invited to visit with the MPH Director to determine their status and encouraged to make adequate progress.
3. If the student has completed the MPH Field Experience Form for enrollment in MPH 840 Field Experience within the next 12 months, that is determined as adequate progress in the program. If the student is not ready for completing the Field Experience requirement after 15-18 months in the program, the following communication is generated:
 - a. An e-mail to the initial advisor or major professor (if they have completed the POS) is sent to determine if the student has contacted them and is progressing in the program.
 - b. An e-mail and/or phone call from the MPH Program Office to the student to determine the student's status.
 - c. The student will be invited to visit with the MPH Director to determine their status and encouraged to make adequate progress.
4. If a student is in the program longer than 36 months every effort will be made to help them progress on an individual basis or determine if their status needs to change from an active student to an inactive student.

Attachment 3 – Course and Curriculum Review Schedule

MPH Course and Curriculum Review Schedule

	Start Year (Academic Year) of term and length of term (number of years)													
Area of Emphasis	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
FSB	1 & 3			2	3			2	3			2		
IDZ	2	3			2	3			2	3				
PHN	3		3			2	3			2	3			
PHPA	2		2	3			2	3			2	3		
FSB Rep	Kastner													
FSB Rep	Nutsch													
FSB Rep				Kastner or Gragg										
FSB Rep					3									
FSB Rep								2						
FSB Rep									3					
FSB Rep												2		
IDZ Rep	Larson													
IDZ Rep		Sanderson												
IDZ Rep					2yrs									
IDZ Rep						3								
IDZ Rep									2					
IDZ Rep										3				
PHN Rep	Rosenkranz													
PHN Rep			Hanson											
PHN Rep						2 yrs								
PHN Rep							3							
PHN Rep										2				
PHN Rep											3			
PHPA Rep	McElroy													
PHPA Rep			Irwin											
PHPA Rep				Mailey										
PHPA Rep							2							
PHPA Rep								3						
PHPA Rep											2			
PHPA Rep												3		
What part of curriculum to review:														
Core Course	720	701	802	708	720	701	802	708	720	701	802	708		
Core Course	818			754	818			754	818			754		
Core Course				854				854				854		
All area specific requirements:	FSB	IDZ	PHN	PHPA	FSB	IDZ	PHN	PHPA	FSB	IDZ	PHN	PHPA		

Attachment 4 – Comprehensive Examination

1) Comprehensive Examination (CPH Exam) Draft

- a. Students are eligible to take the Certification in Public Health (CPH) Exam after completing 21 credits, which must include the core concept courses
- b. Students may repeat the test if a passing score is not obtained or undertake another MPH project option to meet the degree completion requirements
- c. Becoming a CPH professional provides a standard of knowledge and skills in public health; encourages life-long learning; adds credibility to the public health profession; increases public health awareness; fosters an environment of professional community.
- d. To maintain CPH status, CPH professionals are required to obtain and document 50 hours of continuing education every two years
- e. The CPH Exam is offered three times a year
 - i. 866-514-7569, email info@nbphe.org or <http://www.publichealthexam.org>
 - ii. \$385
- f. Requires documentation of exam result and oral/poster presentation to student group, conference attendees, faculty, or MPH committee
 - i. student group presentation requires documentation of meeting announcement/flyer and student evaluations
 - ii. conference presentation requires a copy of the abstract and/or scheduling showing participation
 - iii. faculty or committee presentation requires signatures from 1-3 faculty/committee members
- g. Oral/poster presentation can cover topics such as field experiences, current public health topics, application of a core competency, etc.
- h. Credit distribution

Master of Public Health Program

Field Experience Meeting

Required for all students enrolled in MPH 840 during
Su 2016, Fall 2016 or Spring 2017

Lunch provided by Arrow Coffee **if you RSVP**

Date: Wednesday, November 9

Time: Noon to 1:00 PM

Place: Mara Center 4th Floor Trotter Hall

Topics: Before and After your Field Experience ... What to do.
Report and Seminar Standards ... How to do it.

Please **RSVP** by November 3 (so we order enough food)

Email barta@vet.ksu.edu or call 532-2042

Attachment 6 – MPH Faculty Application

APPLICATION MASTER OF PUBLIC HEALTH (MPH) PROGRAM FACULTY KANSAS STATE UNIVERSITY

Please complete this form and send it along with an accompanying brief (2-3 page) Curriculum Vitae to:
Dr. Elynn Mulcahy, Director, Master of Public Health Program, 311 Trotter Hall.

PERSONAL INFORMATION

Name of Applicant: Majid Jaber-Douraki
Title and Department: Assistant Professor, Institute of Computational Comparative Medicine, Mathematics
Office Address: 1800 Denison St. P-200 Mosier Hall, Manhattan, KS 66506-5802
Office Phone: 785-532-4733 Email: jaberid@vet.k-state.edu

PROFESSIONAL RESPONSIBILITIES

Graduate Faculty Status: ☒ Yes ☐ No

Graduate Courses Taught (limit 285 characters)

Optimal Control Theory Applied to Biological Systems, University of New Brunswick, Summer 2010
Quarterly series of lectures on Nonautonomous Discrete Dynamical Systems, Optimal Control Theory, Carrying Simplex, University of New Brunswick, 2009-2010
Fundamentals of Mathematical Modeling for Biologists, spring 2017

PERSONAL STATEMENT

Briefly describe in the space below, your interest, experience, current projects, and other contributions to the Master of Public Health program at Kansas State University (limit 855 characters)

A significant part of my research, which aims to bridge the gap between the Optimal Control and Mathematical Modeling of epidemiological systems, includes the formulation and analysis of public health-related models of infectious diseases that decipher the role of de novo resistance mutations. A major pharmaceutical intervention for management of infectious diseases is the use of antiviral drugs. However, the rise of drug resistance poses significant threats to the effectiveness of drugs. I directly documented the effectiveness of various intervention models by determining optimal treatment strategies which minimized the effect of resistance emergence in the population. I served as the primary investigator on these studies which provided critical information for policymakers to optimize health decisions for antiviral strategies to achieve maximum protection of community health. I plan to teach these in my course next semester and recruit graduate students to work in this area.

10/04/2016

Date


Signature

Attachment 6 – MPH Faculty Application

Majid Jaberi-Douraki

Institute of Computational Comparative Medicine
1800 Denison St. P-200 Mosier Hall, Manhattan, KS 66506-5802

POSITION TITLE: Assistant Professor

EDUCATION AND TRAINING

Institution and Location	Degree	Year	Field of Study
University of Isfahan, Isfahan, Iran	B.Sc.	2002	Mathematics
Amirkabir University of Technology, Tehran, Iran	M.Sc.	2004	Applied Mathematics
Université Laval, Quebec, Canada	Ph.D.	2009	Mathematical Biology
University of New Brunswick, Canada	Postdoc	2010	Mathematical Biology
York University, Toronto, Canada	Postdoc	2013	Mathematical Epidemiology
McGill University, Quebec, Canada	Research Associate	2015	Physiological-Based Modeling

PROFESSIONAL APPOINTMENTS

2005-2009 Graduate Teaching Associate, Faculté des sciences, Université Laval, Quebec, Canada
2009-2011 Postdoctoral Fellow, Faculty of Science, University of New Brunswick, Fredericton, Canada
2011-2013 MITACS Postdoctoral Fellow, Faculty of Science, York University, Toronto, Canada
2013-2015 PDF and Research Associate, Faculty of Medicine, McGill University, Montreal, Canada
2015-2015 PDF and Research Associate, Healthwizer Company and York University, Toronto, Canada
2015- Assistant Professor, College of Arts and Sciences, Kansas State University, Manhattan, USA
2015- Graduate Faculty, Department of Mathematics, Kansas State University, Manhattan, USA
2016- Affiliate, Johnson Cancer Research Center, Kansas State University, Manhattan, KS, USA

PROFESSIONAL SOCIETIES AND SYNERGISTIC ACTIVITIES

Member, Society for Mathematical Biology (SMB)
Member, International Society of Difference Equations (ISDE)
Member, Research Group in Mathematical Inequalities and Applications (RGMIA)

HONORS AND AWARDS

1998-2002 First rank position, Undergraduate School of Mathematics, University of Isfahan
2002-2004 First rank master position, Department of Mathematics, Amirkabir University of Technology
Apr 2007 First rank PhD position and finalist for Carl Hertz Award, Université Laval
2006-2008 FGES-NSERC Scholarship of the Foundation of Université Laval
Only two such scholarships were awarded to students in the whole of the university.
July 2008 Landahl award for the Annual Meeting of the Society for Mathematical Biology
2007-2009 FQRNT Merit Scholarship for Foreign Student, Université Laval
This competition includes all subjects in all universities of the province of Quebec.
May 2009 MITACS HQP Research and Travel Mobility Award, Banff
July 2009 MITACS Research and Travel Award, Makerere University, Uganda

Attachment 6 – MPH Faculty Application

COMPUTER SKILLS AND PARALLEL COMPUTING

C++, MATLAB®, Mathematica, Maple, AUTO and XPPAUT, LATEX

PUBLICATIONS (Last 3 years)

Jaberi-Douraki M. Moghadas SM. Optimality of a Time-Dependent Treatment Profile during an Epidemic. *Journal of Biological Dynamics*. 7(1)(2013) : 133-147.

Jaberi-Douraki M. Heffernan JM. Wu J. Moghadas SM. Optimal Treatment Profile during an Influenza Epidemic. *Differential Equations and Dynamical Systems*. 21(3)(2013) : 237-252.

Jaberi-Douraki M. Moghadas SM. Optimal control of vaccination dynamics during an influenza epidemic. *Mathematical Biosciences and Engineering*. 11(5)(2014) : 1045-1063.

Jaberi-Douraki M. Pietropaolo M. Khadra A. Predictive Models of Type 1 Diabetes Progression: Understanding T-Cell Cycles and Their Implications on Autoantibody Release. *PLOS ONE* 9(4)(2014): e93326.

Liu SW. Pietropaolo M. Khadra A. Autoimmune Responses in T1DM: Quantitative Methods to Understand Onset, Progression and Prevention of Disease. *Pediatric Diabetes*. 15(3)(2014) : 162-174.

Jaberi-Douraki M. Khadra A. Pietropaolo M. Continuum Model of T-cell Avidity: Understanding Autoreactive and Regulatory T-Cell Responses in Type 1 Diabetes. *Journal of Theoretical Biology*, 383 (2015): 93-105.

Jaberi-Douraki M. Modeling dynamic changes in immune tolerance during type 1 diabetes progression: Investigating the contribution of pancreatic beta-cell suicide and homicide in type 1 diabetes. The 2015 AMMCS-CAIMS Congress, Canada.

Jaberi-Douraki M. Pietropaolo M. Schnell S. Khadra A. Unraveling the contribution of pancreatic beta-cell suicide in autoimmune type 1 diabetes. *Journal of Theoretical Biology*, 375(2015): 77-87.

Muhammad F. **Jaberi-Douraki M.** de Souza D. Riviere J. Modulation of Chemical Dermal Absorption by 14 Natural Products: A Quantitative Structure Permeation (QSPR) Analysis of Components Often Found in Topical Cosmeceuticals. *Society of Toxicology*, 2016; The Toxicologist.

Muhammad F. **Jaberi-Douraki M.** de Souza D. Riviere J. Modulation of chemical dermal absorption by 14 natural products: a quantitative structure permeation analysis of components often found in topical preparations. (in revision).

RESEARCH SUPPORT

Ongoing Research Support

84.366B Martinie (PD) Role: Co-PD 03/01/2016–06/30/2017

US Department of Education Mathematics and Science Partnerships grant, Kansas State University

Project: *Achieving the Vision of Excellent Mathematics Teaching and Learning*

To achieve this vision, our primary goal, among other things, is to increase student achievement in mathematical and statistical modeling in a way that demonstrates higher-level thinking and problem solving.

USDA-NIFA-EXCA-005457 Gehring (PI) Role: Co-PI 09/01/2016–08/31/2017

Project: *Food Animal Residue Avoidance Databank (FARAD)*

Attachment 6 – MPH Faculty Application

The goal is to provide updated information that result in the production of innocuous foods of animal.

K-State Global Campus Internal Grant Program, Gehring (PI) Role: Co-PI 09/01/2016–06/30/2018
Project: *Development of online courses in support of graduate certificate in Computational Comparative Medicine*

The project plan is to support the ICCM graduate certificate program.

New Faculty Start-up funds, Kansas State University, Jaber-Douraki (PI) 07/01/2015–06/30/2019
The goal is to develop state-of-the-art mathematical approaches based on *in vivo* and *in vitro* data for type 1 diabetes.

Pending Research Support

U.S. Food and Drug Administration (FDA) Jaber-Douraki (PI) 01/01/2017–12/30/2018
Project: *Unraveling robust optimization algorithms for parameter estimation against population or individual datasets in PBPK models for drugs and nanomaterials*

National Science Foundation (NSF) Jaber-Douraki (PI) 07/01/2017–06/30/2022
Project: *Integrating mathematical, statistical, physiologically-based modeling and experimental approaches to study nanomaterial interaction with cells and within the body*

Completed Research Support

MITACS NCE Strategic Project Jaber-Douraki (PI) 04/01/2011–03/31/2013
Project: *Optimal strategies for antiviral treatment during an influenza epidemic*
Goal: To address the question of optimal timing and treatment level to minimizing cumulative number of infections.

R01 DK053456 Pietropaolo (PI) Role: Postdoc 04/01/2013–02/30/2015
Project: *Enhancement of biomarkers for type 1 diabetes*
Goal: To understand underlying mechanisms for fluctuations observed in immunological response during T1D progression.