#### **ABSTRACT: 2017 ELAM Institutional Action Project Symposium**

**Project Title:** Bring A Scientist to Rounds: New Formats for Teaching and Communication among Clinicians, Scientists and Trainees

Name and Institution: Isabella Grumbach, MD, PhD; Carver College of Medicine; University of Iowa

**Collaborators and Mentors:** E. D. Abel, MD, PhD, Department Chair; M. Suneja, MD, and B. Gehlbach, MD, Residency program directors; Jared Routh, DO, Chief resident; Amy Lee, PhD, Assistant Dean for Research, Chris Cooper, MD, Associate Dean for Education.

**Background, Significance of project:** Our new medical school curriculum emphasizes the integration of clinical and preclinical topics, but we are missing initiatives that link research and emerging science to clinical practice. A previous attempt involving a lecture series entitled "Scientific Concepts for Clinical Trainees and Faculty" was poorly attended and finally abandoned. Thus, interactions of research faculty with clinicians, residents and trainees in the Department of Internal Medicine are limited.

**Purpose/Objectives**: The purpose of this project was to identify new programs to expose clinicians to cutting-edge research, promote a deeper understanding of disease mechanisms, and provide teaching opportunities to PhD and physician-scientists. The objective was to develop three pilot formats and evaluate the effectiveness of each.

**Methods/Approach**: <u>Pilot phase</u>: 1) The plan was discussed with the departmental research advisory committee and identified as a priority. 2) Meetings were held with the Deans for Medical Education and Research to identify "found pilots". 3) Evaluation of previous programs with Department Chair and Residency Program Directors and Education Development Director.

<u>Planning and implementation phase:</u> 1) Predictors of successful implementation were identified: i) Short teaching segments with emphasis on clinical relevance and ii) integration of the new formats into existing educational activities. 2) Several instructional formats were evaluated for feasibility. 3) Faculty surveys were sent to evaluate current teaching activities, level of interest and areas of expertise. 4) Productivity credit for faculty participating in the compensation model was negotiated.

#### Outcomes and Evaluation Strategy: Three formats were developed:

- 1) Conference series featuring two scientists in 20-min talks for an educated non-expert audience.
  - 70 investigators were asked to present, all Internal Medicine faculty and staff were invited. 45 attended the first conference.
- 2) One-slide/3 minute presentations at the beginning of weekly grand rounds to feature a recent highprofile publication.
- 3) Bi-monthly clinical case conferences integrating "a scientific advisor" who will provide a short overview of relevant emerging science.
  - Appropriate topics and a pool of scientific advisors were identified.

Faculty engagement and attendance will be monitored over a 6 month period. Presenting research faculty will be asked whether their presentations have led to new interactions (e.g. mentoring of resident research projects, research collaborations with clinical faculty). Surveys will be sent to trainees after the third clinical case conferences involving "a scientific advisor" to assess knowledge base and impact on clinical practice.

**Conclusion /Impact:** The long-term goal of this action project is to foster new pathways for communication and teaching that integrate the three academic missions in an Internal Medicine Department with a tradition in research and an increasing clinical volume and productivity expectations. Recommendations formatted from evaluation of this project will be given to the College of Medicine Research Advisory Board how extend these activities to other departments.

# **Bring A Scientist to Rounds: New Formats for Teaching and Communication among Clinicians, Scientists and Trainees**

**UNIVERSITY** OF **IOWA** Isabella Grumbach, MD, PhD, Associate Professor and Vice-Chair, Dept. of Internal Medicine, University of Iowa ARVER COLLEGE Collaborators: Christopher Cooper, MD, Associate Dean for Education; E. Dale Abel, MD, PhD, DEO; Brian Gehlbach, OF MEDICINE MD and Manish Suneja, MD, Residency Program Directors; Jared Routh, MD, Chief Resident University of Iowa Health Care

**Background/Significance** 

- New medical school curricula emphasize the integration of preclinical topics into organ system-focused classes, but limited translation of this concept to graduate medical education.
- large department with divergent tracks (60 а physician-scientists, 40 PhD scientists, 200+ clinicians) few interactions between clinicians, researchers and trainees.

### Purpose

- Develop and implement new formats
- to expose clinicians to cutting-edge research and researchers to clinical practice,
- promote collaborations between clinical and • to research faculty,
- to introduce to potential research mentors,
- provide additional, compensated teaching to opportunities to PhD and physician/scientist faculty.



The Department of Internal Medicine is pleased to invite you to the inaugural session of the Research Seminar Series. This venue will offer scientists the opportunity to present their latest discoveries to a diverse audience. During each hour two scientists will present their work in 15 to 20 minutes, after which they will field questions or receive feedback from the attendees. We hope you will join us!

When: first Tuesday of every month (except July) **Time:** 4:30 pm

Where: HP Smith (	Conference Room	(W256	GH)
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March 7	Kin Fai Au	Nedim Ince
April 4	Chad Grueter	Alejandro Comellas
May 2	Rebecca Dodd	Maĥmoud Abou Alaiwa
June 6	Michael Eberlein	Sanjana Dayal
August 1	Anil Chauhan	Ryan Boudreau
September 5	Ferhaan Ahmad	Paloma Giangrande
October 3	John Colgan	Marin Schweizer
November 7	Chris Adams	Loreen Herwaldt
December 5	Chris Benson	Michi Goto

### Presented at the 2017 ELAM® Leaders Forum



## **Faculty Survey**

- 45% of PhD and 30% physician-scientists responded
- 35% no interactions with clinicians or residents
- Joy of teaching/collaborations/finding mentees were main motivations to teach
- 50% interested in participating in new formats

### **Discussion and Impact**

- Activities that integrate all academic missions challenging, but vital for academic institution
- New formats can be created despite "meeting overload" if well integrated into existing activities.
- Work on this project introduced me to faculty engaged in GME and their values and vision.

## **Outcomes**

- Rounds

- Starting in May
- Conference

- Starting in May

# **Evaluation strategy**



#### Executive Leadership in Academic Medicine College of Medicine

### **1. Internal Medicine Research Seminar Series**

Two 20-min talks for non-expert audience

Convenient time and location

Two seminars held

➢ 45 attended 1<sup>st</sup>, 55 2<sup>nd</sup> seminar

#### 2. Feature publication in Internal Medicine Grand

> One-slide/5-min presentation of a recent publication from faculty at the beginning of Grand Rounds

Matched with topic of presentation

Master slide created and distributed

# 3. Expert Scientists in Residents' Clinical Case

> Expert scientists attend bi-weekly clinical case conference to comment and give a brief overview of one relevant scientific concept

Experts were identified

• Track attendance and evaluate engagement after 6 mos • Surveys for Scientists:

new collaborations and resident trainees

• Surveys for Clinicians:

• new collaborations and contacts, impact on practice • Surveys for Trainees:

• Test teaching points, identification of new mentors