

東京大学

Structure of Presentation

Summarize findings of Inui Project

• Summarize findings from 2013 focus group sessions ("Lessons Learned")

Discussion of focus group results

("Insights gleaned")

Suggestions for the future

report





#### • Four Topics of Focus:

- 1. Clarification of the mission of Todai
- 2. Strengths and weaknesses of the Todai curriculum
- 3. Recommendations for reform
- 4. Development of teaching effectiveness measurements

東京大学 THE UNIVERSITY OF TOKIO

# 1. Clarification of the Mission

#### Points of emphasis

- Developing national and international leaders in science
- Developing students with inquiring and creative minds capable of:
  - Synthesizing life sciences
  - · The art of practice
  - Cultural foundations from the humanities

2a. Strengths of Todai curriculum
Students with high academic achievement
Senior professors who are active teachers of

- Senior professors who are active teachers of medical students
- Good student access to physicianresearchers
- Plentiful opportunities for students to engage in research
- Good computer facilities

#### 東京大学

# 2b. Weaknesses of Todai curriculum

- A. Inadequate curriculum development
- B. Delayed professional development of students
- c. Limited Curriculum management centrally
- D. Limited Faculty development for educational roles

東京大学 THE UNIVERSITY OF TOKYO

# Four Weaknesses

#### A. Inadequate curriculum development

- > Lack of consensus on core content
- Restricted teaching methods with overuse of lecturing to the exclusion of other methods
- > Fragmented and short clinical clerkships

東京大学

# Four Weaknesses

- B. Delayed professional development of students
  - Inadequate attention to the habits of lifelong, self-directed learning
  - Late exposure to patients
  - > Limited participation in caring for patients
  - Information overload leading to demoralization and lack of motivation for advanced learning





# 3. Recommendations

- 1. Altered administrative structure
- 2. Curriculum Plan
- 3. Educational innovations/pilots
- 4. Educational Evaluation



東京大学



#### 2b. Curriculum - M3 and M4 years

- Established required clerkships that all students must take
  - Determine which subspecialty subjects are necessary for all students to know regardless of the field of medicine they ultimately choose
  - Create selective clerkships in all other disciplines. Students would enhance learning based on individual preference
  - Required clerkships should be lengthened and should be able to accommodate all students by the end of M3 year

東京大学 THE UNIVERSITY OF TOKINO

#### **2c.** Curriculum - Basic Clinical Skills

- Expand basic clinical skills course in M2 year to prepare students for clerkships in M3 year
- Medical interviewing and establishing patient rapport
- Include teaching for complete physical examination and basic elementary surgery skills

東京大学 THE UNIVERSITY OF TOKIO

## 2e. Establishing learning goals

- All courses (M1 through M4) should develop specific learning goals and objectives for students
  - Explicitly state the knowledge, skills, and behaviors that the successful student will achieve in the core content
  - Specific content goals are proposed by the department but review and final approval should be by a multi-disciplinary curriculum committee

東京大学

#### 2d. Curriculum - Experiential clerkships

- Create structure in required clerkships for students to become vital members of clinical teams
  - Emphasize those activities that all physicians, regardless of ultimate field of practice, should have experienced
  - Both practical skills as well as specific disease knowledge within each discipline should be defined



## **3b. Early Clinical Experiences**

- Curriculum committee should determine what M1 students should have in terms of early clinical exposure
  - Important for professional development
  - Enhance student dedication toward medicine
- Learning goals for these experiences
  - Acquiring understanding of the illness experience
  - Evaluation of the undiagnosed patient
  - Experience of medical care from the family perspective
  - ◆ Career challenges for practicing physicians 東京大学

- 3c. Innovations -eLearning
- Working committee should develop computer generated and web-based teaching tools for undergraduate curriculum
  - Should include both basic science and clinical science disciplines
  - > Should include informatics expertise
  - Could be a focus for multi-institutional collaboration

東京大学



# 4. Educational Evaluation - Courses

- Establish systematic approaches to course and faculty member teaching effectiveness
- Pilot measures should be developed and field-tested by the new Center for Research in Medical Education
- When ready, measures should be routinely used and data archived
  - Curriculum committee (in curriculum review)
  - > Department Chairs (in faculty reviews)
  - > Both (for course improvement)

**東京大学** THE UNIVERSITY OF TOKHO



#### 4b. Educational Evaluation - Teachers

- Develop an original measure of teaching effectiveness
- Use this for tracking and improving the quality of teaching effort
- Questionnaire instrument that students could complete in a few minutes
- Informed by the educational literature
- Customized to assure goodness-of-fit with Todai culture





## Methods

oSeven 90 minute focus group meetings

• 14 Univ. of Tokyo Faculty teachers

•9 Univ. of Tokyo Medical Students

oQuestions were based on sections from the Inui project report

東京大学



# **Faculty Participants**

- Masato Eto Geriatrics/Clinical Training Center
- Masataka Gunshin Emergency Medicine
- Shoko Horita Nephrology/Clinical Training
- Noriko Hosoya Disease Biology/integrative Medicine
- Masahide Kikkawa Cell Biology and Anatomy
- Yasuki Kobayashi Public Health
- Norihiro Kokudo Hepatobiliarypancreatic Surgery
- Hiroki Kurihara Physiological Chemistry/Metabolism
- Mineo Kurokawa Hematology and Oncology
- Shigeo Okabe Cellular Neurobiology
- Daisuke Son Int'l Research Center for Med Education
- Sumihito Tamura Surgery/Clinical Training Center
- Yusuke Tanoue Colorectal Surgery
- Takeya Tsutsumi Infectious Disease/Clinical Training 東京大学

Focus Group Methodology oNo monetary incentive was provided oAudio recordings of each session

were transcribed

oResponses kept anonymous

oRecurrent themes, statements, and opinions were compiled

# SEVEN focus group categories

- 1. General Structure of Medical School curriculum
- 2. Does the curriculum encourage development of leaders in science and curious, life-long learners?
- 3. Are medical students becoming critical thinkers or merely memorizing facts for the examinations?
- 4. How does the present curriculum address professional development of medical students?
- 5. How effective is student, teacher and programmatic evaluation being conducted?
- 6. What is the state of student/faculty relations?
- What is the strongest aspect of Todai ? What aspect is in most need of change? What are barriers to change?

東京大学





# 1. General Curricular structure

#### Lectures

- > Still predominate in M-1 and M-2
- > Different opinions on what should be presented
- Similar views on what IS presented
- Similar views on the value of the time spent
- > Core material not defined

東京大学 THE UNIVERSITY OF TOKID

# Clerkship Curriculum

- Positive change in general
- Somewhat inconsistent between clerkships
- Clerkships are 1-3 weeks long
- Core learning goals not established

東京大学 THE UNIVERSITY OF TOKYO

# 3. Developing Critical Thinkers or Memorizers?

- Primarily evaluated through examinations that test knowledge
- Examinations are "easy" and are often reused
- Students spend most time memorizing old tests
- Clinical reasoning and critical thinking seems lacking

東京大学 me UNWIRSTY OF TOXIO

# 2. Developing leaders and life-long learners

- There are many opportunities provided to students
  - > Free Quarter
  - > MD-PhD track
  - > Basic and Clinical Research courses
- Most students (70-80%) do not make use of these opportunities
- A mentoring system exists but could be improved

東京大学 THE UNIVERSITY OF TOKYO

#### 4. Early Professional Development

- New clerkship is likely to provide greater hands on experience
- Opportunities are provided for students to gain early clinical exposure
- This clinical exposure is not directly related to basic science curriculum
- Clinical correlations in basic sciences are infrequent

東京大学 THE UNIVERSITY OF TOKYO

# Early Professionalism

- Japanese Educational system requires early career choice
- Many smart students (good test takers) come to medical school
- Maturity level in some students is low
- The interest in being a physician in some students is low

東京大学 THE UNIVERSITY OF TOKING

# **Evaluation in New Clerkships**

- Learning portfolios introduced
- Learning contracts too early to know
- Student are not told the results of their clinical evaluations (yet)
- No assessment of knowledge gained or skills acquired is performed
- Each clerkship is undergoing programmatic evaluation
- Professor's teaching is evaluated

# 5. Effective Evaluation

- Basic science courses and teaching are infrequently evaluated
- Students are essentially only evaluated by test scores
- Free quarter is not meaningfully evaluated (learners, teachers or course)

東京大学 THE UNIVERSITY OF TOGOD

# 6. Faculty/Student Relations

- Very Cordial for the most part
- Students feel comfortable speaking with teachers
- Sometimes clinical teachers seem to be "too busy" for students

# 7. Best thing about Todai

Top reputation

- Talented Faculty
- Smart Students
- Lots of free time
- Diversity of campus

# **Biggest barrier to change**

- No incentives to teach
- Lack of faculty development process
- Little accountability for the "end product"
- Not enough staff devoted to educational purposes
- Japanese education system is not set up for interactive learning

東京大学 THE UNIVERSITY OF TOKHO





# Insights and suggestions

• Big Picture

- Walk before you run
- Evaluation, self-evaluation and renewal
- Developing faculty and students

東京大学 THE UNAMERITY OF TOKID











- Centralized Curriculum Committee to oversee and administer the curriculum
- Define Learning goals and objectives for each course (Basic and Clinical)
- Allot time based on learning goals and time needed to achieve them

東京大学 THE UNIVERSITY OF TOKINO



# Running too soon?

- What knowledge, skills and behaviors should a graduating M-0 have to be successful?
- What level of self-motivation should we expect of the students
- How to we help them to understand their future career choices
- How do we make sure they make the correct choice?

東京大学 net UNIVERSITY of TOKIO





# Suggestions for running

Associate Dean for Student Development

- Monitors student progress throughout all 6 years
- Provides resources for students who are struggling
- Coordinates and enhancing mentoring program
- Creates a career development program for maximizing student success
- > Addresses remediation and failure

東京大学 THE UNIVERSITY OF TOKYO









# WFME Standard 3.2



- The Medical School must use assessment principles, methods and practices that:
  - Are clearly compatible with intended educational outcomes and instructional methods
  - Ensure that the intended educational outcomes are met by the students
  - > Promote student learning
  - Provide an appropriate balance of formative and summative assessment to guide both learning and decisions about academic progress

東京大学 THE UNIVERSITY OF TOKYO

# **Suggestions for Evaluation**

#### PROGRAMMATIC

- Establish a system for evaluation for every course taught
- Evaluation should assess the appropriateness of the teaching methodologies used
- Base evaluations on criteria related to learning goals
- Use the results of these evaluations to make changes for improvement

東京大学 THE UNIVERSITY OF TOKOD

# Suggestions for Evaluation

**TEACHERS** 

- Establish a system for evaluation of teachers at all levels
- Base evaluations on criteria related to teaching qualities
- Reward effective teaching
- Correct ineffective teaching

#### 東京大学 net UNWEARTY OF TOKYO

# **Suggestions for Evaluation**

#### **STUDENTS**

- Evaluate more than just student knowledge
- Train teachers to craft examination questions that test higher order thinking
- Create criteria related to clinical skills and behavioral attitudes
- Strive for quality/competency based rather than mere task completion
- Create greater accountability for performance

東京大学 THE UNIVERSITY OF TOKYD



# <section-header><section-header><section-header><list-item><list-item><list-item>

# Faculty Development Suggestions

- Make effective teaching a high priority
- Create time in teacher's work schedules to allow for effective teaching
- Tangibly reward excellent teaching
- Encourage and support faculty development

東京大学 THE UNIVERSITY OF TOKINO







# Summary

- Todai has made great improvements since the original publication of the Inui report
- Several areas of important need are identified to focus future improvement efforts
- These improvements will enhance education for students and ease achievement of accreditation