

Session 2: Collective Impact in Research, Scholarship and Creative Achievement

Dean Drake
Eugene Schaffer
Yonathan Zohar

ACE INTERNATIONALIZATION LAB

The ACE Internationalization Laboratory

- An invitational learning community that assists participating institutions in developing capacity, capability, and strategy for comprehensive internationalization.
- Involvement lasts 16-20 months.
- Each cohort is 10-12 institutions.
- 138 institutions (including you!) have participated.
 - U.S. and international
 - All sectors



Laboratory Timeline

- Sept. – Dec. 2018
 - Form Committees
 - ACE Advisor Site Visit (Dec. 13)
- Jan. – Jun. 2019
 - Collect and Analyze Data
 - Develop Initial Findings
 - Benchmark Peers and Industry Standards
- **July – Oct. 2019**
 - **Verify Findings with Stakeholders**
- Nov. 2019 – Mar. 2020
 - External Peer Review
 - Review Drafts of Report
- July 2020
 - Submit Final Report to Institutional Leadership

UMBC Lab Structure





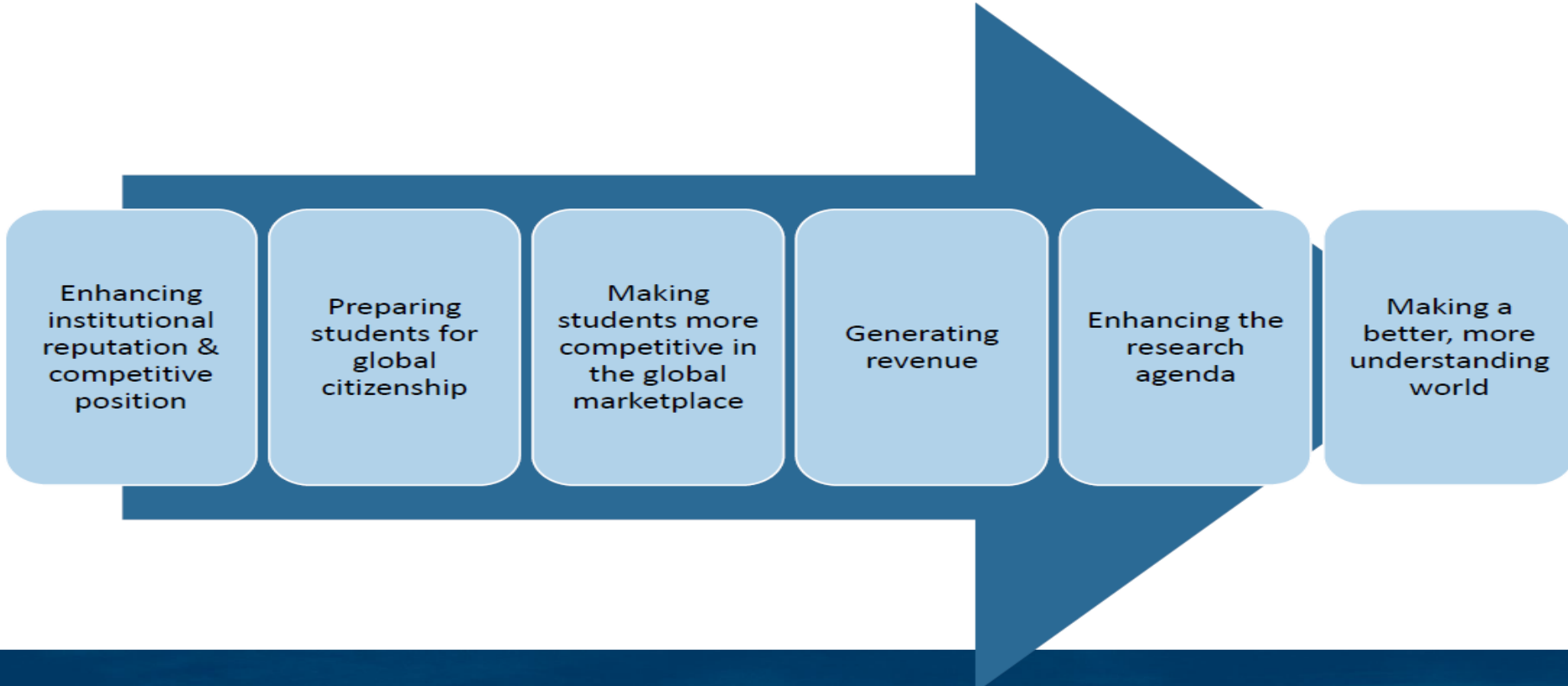
Comprehensive internationalization is a strategic, coordinated process that seeks to align and integrate policies, programs, and initiatives to position colleges and universities as more globally oriented and internationally connected institutions.

– American Council on Education

Comprehensive internationalization is not just **“What are we doing?” ...**

- ✓ Study abroad
- ✓ International students and scholars
- ✓ Linkages/institutional partnerships and exchanges
- ✓ On-line education (virtual study abroad) and internationalized courses
- ✓ Area studies programs
- ✓ Foreign language
- ✓ International studies (interdisciplinary)
- ✓ International business (multi-regional, discipline-based)
- ✓ Research collaboration
- ✓ Dual and joint degree programs
- ✓ Outreach
- ✓ Cross-cultural events and training
- ✓ Etc.....

...Comprehensive internationalization answers
“Why are we doing this?”



Enhancing
institutional
reputation &
competitive
position

Preparing
students for
global
citizenship

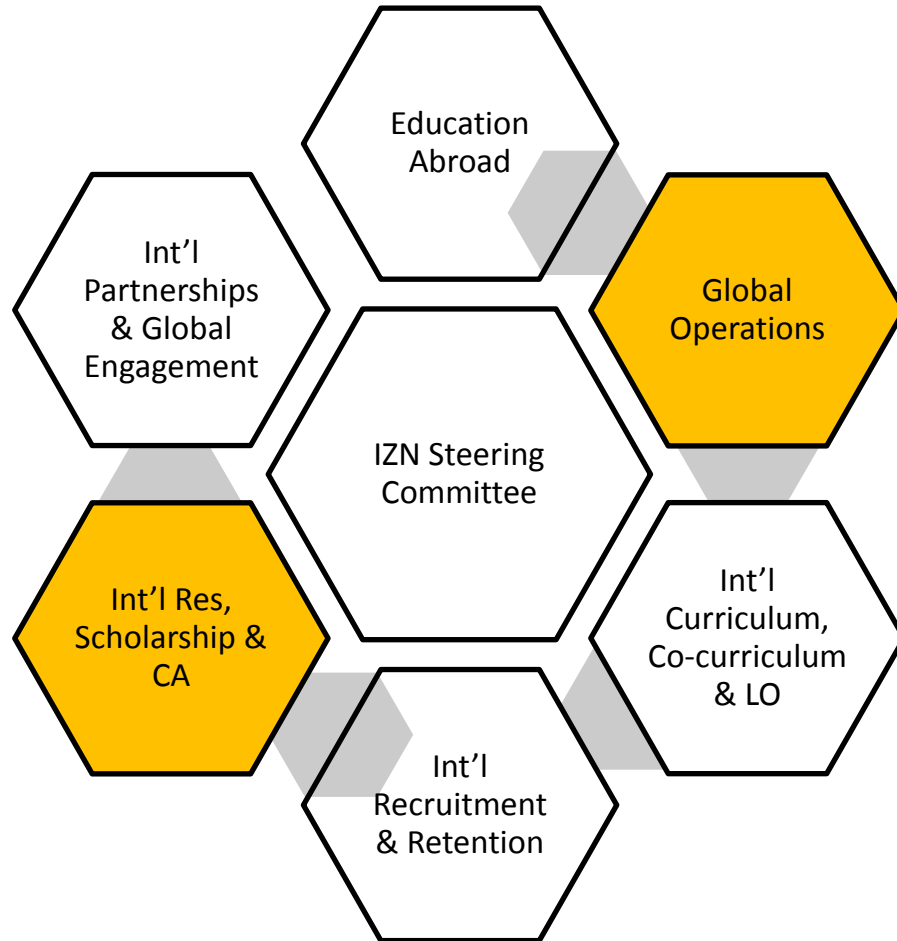
Making
students more
competitive in
the global
marketplace

Generating
revenue

Enhancing the
research
agenda

Making a
better, more
understanding
world

SUBCOMMITTEES



INTERNATIONAL RESEARCH

International Research, Scholarship, Creative Achievement Subcommittee Members

- Dr. Eugene Schaffer (chair), Professor, Education
- Dr. April Householder, Director of Undergraduate Research and Prestigious Scholarships, Office of Undergraduate Education
- Dr. Anupam Joshi, Professor and Chair, Computer Science and Electrical Engineering
- Dr. Christine Mallinson, Professor, Language, Literacy, and Culture and Director, Center for Social Science Scholarship
- Dr. Connie Pierson, Associate Vice Provost, IRADS
- Dr. Nagaraj Neerchal, Professor, Statistics and Math
- Dr. Vanderlei Martins, Professor, Physics
- Dr. Shawn Bediako, Associate Professor, Psychology
- Miriam Tillman, Assistant VP, Marketing & Creative Services, Institutional Advancement
- Dr. Antonio Moreira, Vice Provost for Academic Affairs
- Dr. David Di Maria, Associate Vice Provost, International Education Services
- Dave Anguish, International Student/Scholar Advisor, International Education Services
- Adam Holden, General Associate, International Education Services

International Research Subcommittee Charge

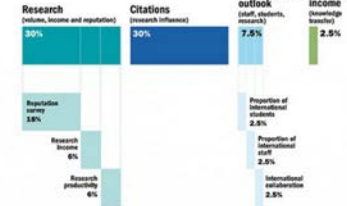
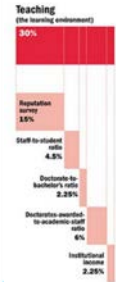
- Examine current status of UMBC research involving international focus
- Identify tactics to increase international research activity as outlined in the strategic plan
- Assess and improve UMBC's placement within global academic rankings
- Assess the incorporation of faculty research/engagement work with undergraduate research opportunities, or opportunities for graduate students
- Produce report with final recommendations/goals

International Rankings



Times Higher Education

EXPLORE UNIVERSITY IMPACT RANKINGS FOR INDIVIDUAL SDGs



World University Rankings

2019 Rank: 501-600

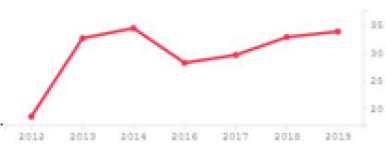
[View full ranking table](#)



Ranking position 2012 to 2019:

Year	Ranking Position
2012	301-350
2013	301-350
2014	351-400
2016	401-500
2017	401-500
2018	401-500
2019	501-600

Breakdown via year: INTERNATIONAL OUTLOOK



Note: Updated WUR methodology 2015 onwards

Rank	Name	Best scores by rank	Overall
24	University of North Carolina at Chapel Hill United States	13 94.9, 9 92.2, 11 84.9, 17 71.9	90
=35	Arizona State University United States	12 77.7, 11 78.5, 5 68.4, 17 86.6	87
62	University of Maryland, Baltimore County United States	13 75.1, 10 59.6, 11 74.1, 17 77.7	81

[Times Higher Education, 2019](#)

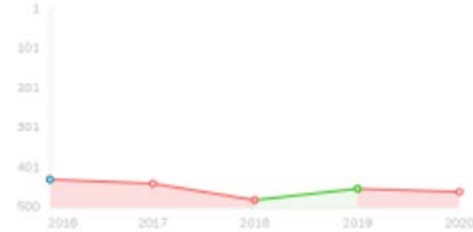
International Rankings

QS World University Ranking
#460

QS WUR By Subject Ranking
#=214

QS World University Ranking

Starting Rank: Ranked Higher (Green), Ranked Lower (Red)



Ranking Criteria

Overall Score: 25.4

Academic Reputation: 10.3

Employer Reputation: 5.4

Faculty Student: 12.6

Citations per Faculty: 83.7

International Faculty: 14.9

International Students: 13.3

Chart Data

# RANK	UNIVERSITY	ACADEMIC REPUTATION	EMPLOYER REPUTATION	TEACHING QUALITY	INTERNATIONAL FACULTY	INTERNATIONAL STUDENTS
2019	Univ Search	1F	1F	1F	1F	1F
199	University of Alabama at Birmingham	62.3	85.5	75.7	35.7	
199	Weizmann Institute of Science	76.2	72.3	61.1	50	
203	King Abdulaziz University (KAU)	71.4	74.6	57.2	72.3	
203	The Scripps Research Institute (TSRI)	71.5	79.4	62	47.2	
205	The University of Newcastle, Australia (UON)	71.4	74.3	59.2	66.8	
206	Fundación Universidad Católica de Chile (UC)	80.6	62.2	50.1	82.1	
206	University College Cork	70.8	71.2	59.7	75	
208	Universidad de Chile	78.7	64.1	52.7	77.1	
209	Yajpei Medical University (TMU)	77.3	68.2	48.8	81.7	
210	George Washington University	66.2	78.9	64.6	58.5	
210	Universidad Autónoma de Madrid	74.2	73.3	52.1	71.5	
210	University of Antwerp	68.6	76.1	64.2	56.8	
210	Wake Forest University	59.8	85.8	68.8	56.5	
214	Humboldt-Universität zu Berlin	80.4	65.6	50.1	70.1	
214	University of Maryland, Baltimore County	67.4	80.1	62.9	54.3	

Academic reputation (40%)

The highest weighting of any metric is attached to an institution's Academic Reputation score. Based on our Academic Survey, it captures the expert opinions of over 54,000 individuals in the higher education space regarding teaching and research quality at the world's universities. In doing so, it has grown to become the world's largest survey of academic opinion, and, in terms of size and scope, is an unparalleled means of measuring sentiment in the academic community.

Employer reputation (10%)

Students will continue to perceive a university education as a means by which they can receive valuable preparation for the employment market. It follows that assessing how successful institutions are at providing that preparation is essential for a ranking whose primary audience is the global student community.

Our Employer Reputation metric is based on almost 41,000 responses to our QS Employer Survey, and asks employers to identify those institutions from which they source the most competent, innovative, effective graduates. The QS Employer Survey is also the world's largest of its kind.

Faculty/Student Ratio (20%)

Teaching quality is typically cited by students as the metric of highest importance to them when comparing institutions using a ranking. It is necessarily difficult to measure, but we have determined that measuring teacher-student ratios is the most effective proxy metric for teaching quality. It assesses the extent to which institutions are able to provide students with meaningful access to lecturers and tutors, and recognizes that a high number of faculty members per student will reduce the teaching burden on each individual academic.

Faculty/student ratio constitutes 20 percent of an institution's final score.

Citations per faculty (20%)

Teaching is one key pillar of an institution's mission. Another is research output. We measure institutional research quality using our Citations per Faculty metric. To calculate it, we take the total number of citations received by all papers produced by an institution across a five-year period by the number of faculty members at that institution.

To account for the fact that different fields have very different publishing cultures - papers concerning the Life Sciences are responsible nearly half of all research citations as of 2015 - we normalize citations. This means that a citation received for a paper in Physiology is measured differently to one received for a paper on Anatomy and Physiology, ensuring that, in measuring an institution's total research impact, both citations are given equal weight.

We use a five-year publication window for papers, so for this edition we looked at papers published from 2013 to 2017. We then take a look at a six-year citation window, reflecting the fact that it takes time for research to be effectively disseminated. In this edition we look for citations from 2013-2018.

All citations data is sourced using Elsevier's Inspec databases, the world's largest repository of academic journal data. This year, QS assessed 78 million citations from 13.8 million papers over self-citations were excluded.

International faculty ratio/International student ratio (5% each)

A highly international university engages and enrolls a number of subgroups. It demonstrates an ability to attract faculty and students from across the world, which in turn suggests that it possesses a strong international brand. It implies a highly global outlook, essential for institutions operating in an international higher education sector. It also provides both students and staff alike with a multicultural environment, facilitating exchange of best practices and beliefs. In doing so, it provides students with international symposiums and global awareness, soft skills increasingly valuable to employers. Both of these elements are worth 1% of the overall total.

GLOBAL OPS

Global Operations Subcommittee Members

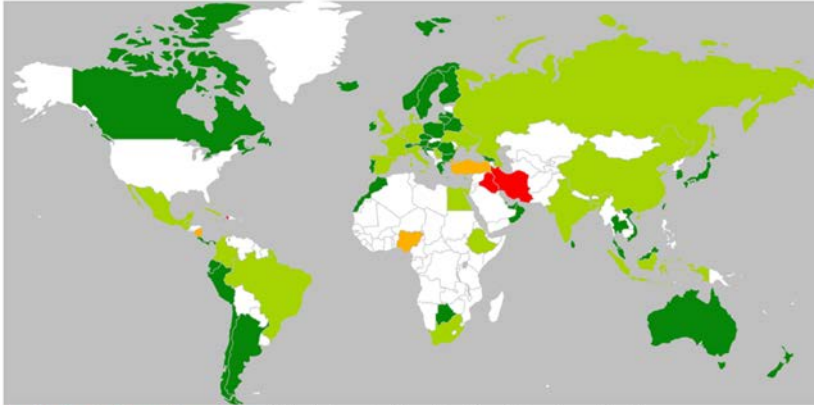
- Dean Drake, Associate Vice President for Research, VP for Research (co-chair)
- Christopher Tkacik, Sr. Associate General Counsel, General Counsel (co-chair)
- Kimberly Campion, Administrative Assistant, Environmental Safety and Health
- Gayle Chapman, Assistant Controller, Financial Services
- Linda Rothfus, Manager of Business Services, Financial Services
- Janet Maddox, Exec Assistant, General Counsel
- Trisha Wells, Associate Vice Provost, Finance and Administration
- Elizabeth Moss, Executive Director, Procurement and Strategic
- Peggy Ingle, Assistant Manager of Business Services, Financial Services
- Sasha Hudson, Assistant VP & Controller, Financial Services
- David Di Maria, Associate Vice Provost, International Education Services
- Adam Holden, General Associate, International Education Services

Global Operations Subcommittee Charge

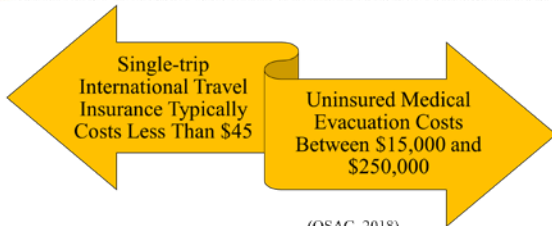
- Identify internal guidelines, policies and procedures that impact global engagement
- Perform an audit of UMBC's current international projects, activities and contracts
- Analyze results for exposure and risks (e.g., health, legal, safety and security)
- Recommend strategies to enable global engagement while reducing risks
- Produce report with final recommendations/goals for supporting global operations

Global Operations

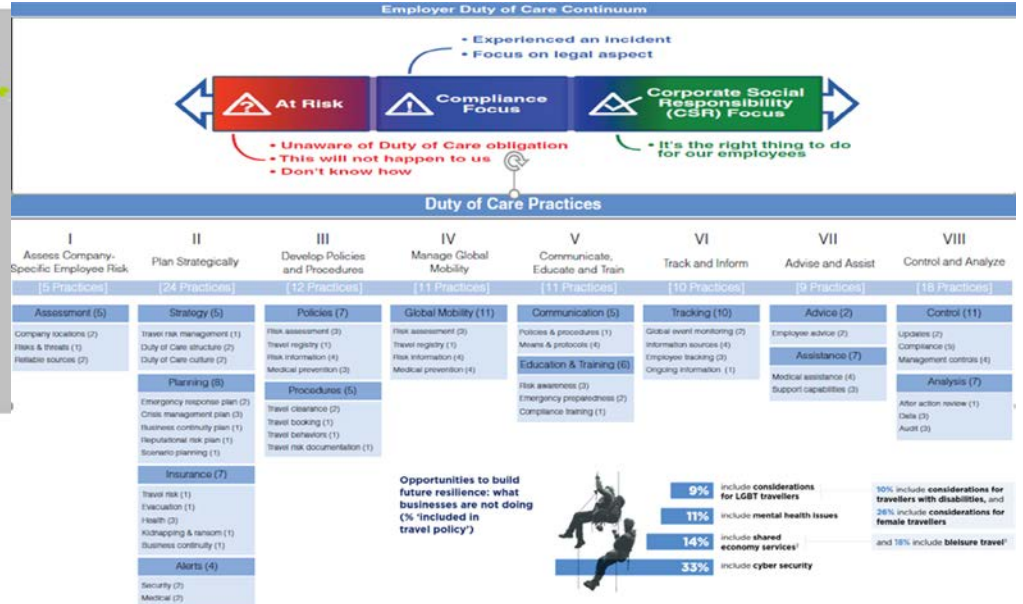
Destinations Coded by State Department Travel Advisory Level



- Level 1 - Exercise Normal Precautions:** This is the lowest advisory level for safety and security risk.
- Level 2 - Exercise Increased Caution:** Be aware of heightened risks to safety and security.
- Level 3 - Reconsider Travel:** Avoid travel due to serious risks to safety and security.
- Level 4 - Do Not Travel:** This is the highest advisory level due to greater likelihood of life-threatening risks.



(OSAC, 2018)



Faculty Case Study in Action

- Dr. Yonathan Zohar
 - Global Research
 - International Collaborations
 - Student and Faculty Exchanges
 - Joint Publications
 - Commercialization of technologies

A Perspective of an “International” Marine Biologist

Yonathan Zohar

Chair, Department of Marine Biotechnology

Institute of Marine and Environmental Technology

University of Maryland, Baltimore County



UMBC

AN HONORS UNIVERSITY IN MARYLAND



Marine Biology is a global science-
by definition



Marine Biology/Biotechnology can reverse these trends

Food

Water



Energy

Medicines

It is a global science- by definition

- Oceans have no boundaries
- Study, protect and enhance marine and estuarine resources
- Research involves scientists around the world
- International collaborations
- Many faculty and student exchange programs
- International funding- EU H-2020, NSF transformational, NSF/BSF, NOAA, NIH, USDA, BARD, USAID
- Global technology transfer, commercialization

Every drop in the ocean has global ripple effects...



DISCUSSION

Feedback Requested

- What are the motivations and barriers to engaging in international research collaborations?
- How can UMBC provide better support for engaging with international collaborators?
- How can we better leverage UMBC's existing international research networks and connections?

Feedback Requested

- How best can we communicate with faculty and staff about international opportunities?
- How can we keep better track of UMBC's international engagements?
- What pre- and post- international travel support do you need?
- How can we increase the number of visiting international scholars at UMBC?

Feedback Requested

- Do the initial recommendations and SWOT analysis resonate?
 - What's missing?
 - What would you change?
 - What surprises you?

Internationalization Survey

- Please complete the short survey
 - retreat.umbc.edu/sessions

Final Questions, Comments