

XIAOBO YU, Ph.D.
Curriculum Vitae

Department of Biological Sciences
Kean University
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I. EDUCATION

- 1990 Ph.D., Biology, Yale University
- 1981 M.Sc., Paleontology, Graduate School of the University of Science and
 Technology of China (current name: Graduate University of the Chinese Academy of
 Sciences)

II. UNIVERSITY APPOINTMENTS

Kean University

Acting Dean, College of Natural, Applied & Health Sciences, July 2006 – June 2008
Professor, Department of Biological Sciences, 2001 – present.
Associate Professor, Department of Biological Sciences, 1998 – 2001
Assistant Professor, Department of Biological Sciences, 1994 – 1998

College of New Rochelle

Assistant Professor, Department of Biology, 1991 – 1994

School of Graduate Medical Education, Seton Hall University

Guest Lecturer, Orthopedic Resident Program, 1996 – 2001

Yale University

Lecturer, Summer Science Program, 1989 – 1997 (summer)
Museum Assistant II (Herbarium Collection Manager), Peabody Museum, 1989 – 1991
Chinese Language Instructor, Dept. of East Asian Languages and Literature, 1986 – 1989

Quinnipiac College

Lecturer II, Department of Biology, 1991; 1993

Peking University, China

Invited Professor, College of Earth and Space Sciences, 2002

Beijing Normal University, China

Invited Professor, College of Biological Sciences, 2002

National Museum of Natural History, France

Invited Research Professor, 1998 (summer)

III. ADMINISTRATIVE AND LEADERSHIP EXPERIENCES

Acting Dean, College of Natural, Applied & Health Sciences, July 2006 – June 2008

- **Responsible for college administration, management and leadership** in research, curriculum, budget, facilities, academic and student affairs, grant and outreach activities, and personnel management (recruitment, reappointment, tenure, promotion and employee evaluation)

- **Promoting collaborative and shared decision making for effective leadership**
 - maximizing daily and weekly contact and open communication with Department Chairs and coordinators
 - using the Administrative Diet Meetings as a platform for collaborative decision making and synergy building
 - using the College's All Faculty/Staff meetings as a platform to build consensus, to promote faculty/student scholarly exchanges, and to build strong relationships with key campus offices/units (Alumni Office, Admission Office, Registrar Office, Office of Career Development and Advancement, Library, ORSP, and Kean University Foundation)
 - resolving issues in a timely and efficient manner and keeping focused on moving the College forward beyond the level of routine management and maintenance
 - promoting dialogue and resource sharing across departments, disciplines and College units
 - maximizing efficiency and support by building synergy with NJCSTME, COE, and other Colleges/Schools and University offices

- **Building on the College's strength in response to national priorities in science and health education**
 - promoting faculty scholarship, student involvement in undergraduate and graduate research, teaching and curricular innovations, and educational outreach
 - encouraging faculty involvement in student recruitment and retention and student support
 - promoting interdisciplinary scholarship and collaboration among faculty in science, mathematics, health and education disciplines
 - promoting success in grant development and grant writing
 - adopting nationally successful models in college science teaching and incorporating technology to promote active learning and hands-on experiential learning
 - building a strong student community to promote peer motivation and interaction

- **Establishing the Institute of Urban Ecosystem Studies (IUES) as the College's unique Center of Excellence**
 - worked closely with all Department Chairs and faculty to develop the concept of the Institute of Urban Ecosystem Studies (IUES) for building a strong interdisciplinary team of scholar-teachers and for benefitting all departments and programs in the College through faculty-student research, curricular innovations, campus and community outreach, and internal/external grant development
 - provided support and guidance for faculty-led Steering Committee and secured initial administrative and resource support (3 allocated faculty lines, 1 part-time Academic Specialist position, essential office space, Library budget allocation, and 2 leased vehicles for field trips – also available for class and College business use)
 - supported IUES to organize events such as lectures/seminars, field restoration projects and community outreach activities impacting over 300 Kean students in 2006-07 (Post-glacial history of Pine Barrens - Demitroff, Fragmented Forest: Union County Parks and

- Biodiversity – Codella; Reflections on *An Inconvenient Truth* ; Focus the Nation Teleconference on Global Warming; field trips to Pine Barrens and Warinanco Park; Earth Day with EPA at Elizabeth Marina; Union County BioBlitz at Watchung Reservation; and Epsilon Corps Science Celebration Day at Kean).
- promoted interdisciplinary scholarship through IUES resulting in 17 papers/posters at national and regional conferences and 7 publications, 1 Schering-Plough Research Mentor Award, 2 SpF07 awards, 3 UFRI awards and 1 Kean University Foundation Research Initiative award, and the development of 1 interdisciplinary course entitled *Urban Ecology*
 - supported IUES in developing external partnership with the Union County Department of Parks, Recreation and Facilities, New Jersey Conservation Foundation, New Jersey Environmental Protection Agency, New Jersey Earth Science Teacher Association, the NYC-based WildMetro, National Weather Service, Association of American Geographers, USDA/Animal and Plant Health Inspection Service
 - provided a platform for shared focus in scholarship and community outreach for science and health disciplines such as issues of environmental impact on diseases and health
- **Securing support from the Administration and Facilities to achieve major infrastructural upgrades**
 - brought a more professional look to the College by having Science Building stairways, Bruce Hall hallway, and NAHS areas in Townsend and Hennings Hall repainted, renovated and/or upgraded with new signage and bulletin board displays
 - renovated and upgraded the Biology Conference Room (C-110) and the Chemistry/Physics Break room/Mail room (B-220G)
 - converted 3,305 sq ft of under-utilized space into space for active teaching and research areas (relocation of Herbarium from C139 to C309 yielded 440 sq ft of premium first-floor space for biology faculty/student research; renovation of C309 turned the former Animal Facilities into a 1,375 sq ft multi-functional suite for interdisciplinary faculty/student research and CAMS grant operation; decommissioning of the former Radioactive Laboratory added 1,070 sq ft of laboratory space to meet the urgent needs of chemistry courses; removal of the outdated and useless equipment and chambers from C143 and C153A converted 420 sq ft of non-usable space into potential space for research and research support for Biology.)
 - upgraded and reorganized the public area in the Dean's office to make the office more professional and more service-oriented
 - **Providing critical support and guidance to departments during reorganization, program reallocation and unexpected leadership change**
 - worked closely with the Administration, Department Chairs, Program Coordinators and faculty to resolve procedural issues related to the departmental reorganization involving the former Department of Mathematics and Computer Science and the Department of Technology
 - provided support and guidance to the newly formed Department of Mathematics and Department of Computer Science in establishing faculty-governance structures, in exploring opportunities for programmatic and curricular innovations, and in organizing events/activities to promote student engagement, recruitment and grant success (Mathematical Sciences and Statistics Career Workshop; ACM student club; public lecture on computer network security; Northeast regional computer programming contest, and S-STEM grants development)
 - supported Program Coordinator for Technology Programs to ensure essential course offerings in the absence of continuing full-time Technology faculty in 2007-08 and to provide a teach-out plan for the phased-out CIDMT program
 - worked closely with the Administration and the faculty in Occupational Therapy to ensure program integrity and uninterrupted leadership following the loss of the former Chair, to

- resolve outstanding issues in academic standard and student project supervision, and to provide special support for the Department in Open House and outreach events, in new faculty recruitment, and in continued compliance with accreditation standards
- worked closely with the faculty in Health Information Management to secure institutional approvals and to ensure smooth transition and continued momentum in enrollment as the program is converted into a joint degree program with UMDNJ
- worked closely with the Chair of Biological Sciences to appoint new coordinators of Medical Technology and of the NJ Marine Consortium following the transfer of the previous coordinator from NAHS to COE
- **Supporting new programs, curricular offerings, and on-going initiatives**
 - supported the 3+3 Physician Assistant track leading to a B.A. in Biology from Kean and a Master of Science-Physician Assistant from UMDNJ by allocating release time for department advisor/coordinator
 - supported the new Statistics option in Mathematics with publicity, career awareness workshop and essential computer equipment
 - supported Nursing in its expanding operations at Ocean County College and Raritan Valley Community College and its on-going efforts to develop and/or formalize articulation agreements with nursing programs at Muhlenberg School of Nursing and the Middlesex County College
 - supported Biology, Chemistry and Computer Science in their efforts to explore future course offerings at Ocean County College
 - supported Chemistry in developing a new option combining business/marketing and science to position students at the interface of both disciplines, and worked with the Office of Career Development and Advancement to plan a Pharmaceutical Career Fair in Spring 2008 to promote interest in related career paths (Chemistry, Biology, Statistics, Business, Marketing)
 - supported Geology/Meteorology in converting PBM options into Second Degrees to attract more students
 - supported and encouraged Chairs to develop initiatives to enhance recruitment and retention
- **Promoting research, teaching innovations, and professional growth for faculty/staff**
 - conducted NAHS Faculty/Staff Achievement Survey to recognize faculty/staff scholarly achievements, documenting 27 major publications and numerous conference presentations and awards since Fall 2006
 - organized faculty/student poster exhibits and presentations on teaching innovations and grant success at the College's All Faculty/Staff meetings
 - supported faculty members in developing research agenda resulting in successful internal grant awards (4 SpF 07, 10 UFRI, 2 FFRA, 1 QFI, 1 RTR and 1 TFRI for 2007-08)
 - supported junior faculty research by providing supplementary equipment/supply support
 - worked with Epsilon Corps grant co-PIs and the Center for Academic Success (CAS) to promote nationally-recognized Peer-Led-Team-Learning (PLTL) model to enhance student success in critical courses in Biology, Computer Science, and Mathematics
 - supported the adoption and integration of classroom technology (instant response clickers, environmental sensors, GPS units, Web-CT) through workshops and demonstrations
 - mentored the 2006-07 cohort of NAHS new faculty members for success in research, teaching and grant development
 - initiated student advisement training workshops provided by Dean's Office staff
 - supported the faculty research seminar series jointly initiated by NJCSTME and NAHS faculty

- promoted publicity to recognize faculty/staff/student achievements through bulletin board exhibits, events/achievements coverage in Administrative Report, and ongoing initiatives to develop a College newsletter
- motivated and guided faculty and student representatives to make a well-received presentation to the Board of Trustees highlighting the College's recent achievements and initiatives
- **Directing and supporting grant operations and outreach activities**
 - directed NSF STEP "Epsilon Corps" grant -\$966,933 over 5 years, featuring mentoring, tutoring, sequenced curricular support and community building to enhance recruitment and retention in STEM (science, technology, engineering and mathematics) disciplines.
 - supervised and supported the operations of NSF Kean STEM Scholarship Grant - \$390,000 over 4 years to provide scholarships and mentoring to 40 Mathematics and Science majors
 - supervised and supported the operations of DOE Upward Bound Grant - \$880,000 over 4 years to enhance high-school students' skills and motivation necessary for post-high-school success
 - supported the operations of NSF-Merck Educational Foundation CAMS grant jointly with COE - \$1,600,000 over 4 years to recruit, motivate and train future and existing middle-school teachers in science and mathematics
 - supervised and/or supported Summer Bridge Programs, MARS, WIST, and departmental-managed grants/activities such as Advanced Education in Nursing, Promoting Child Health, AFT Healthcare Grant, Helene Fuld Nursing Education grant, and Early College Awareness Day for Harrison Elementary school of Roselle
- **Promoting success in grant development and fund raising**
 - represented the College at NSF national conferences on STEP (Science Talent Expansion Project) grant and CAMS (Consortium for Advancing Mathematics and Science) grant and at regional NSF and DOE workshops on grant development (TRIO grant; C-PATH grant for rejuvenating computer science education)
 - supported the NSF MRI (Major Research Instrumentation) grant "Acquisition of Computing Equipment to Enhance Computational Science Research at Kean University" - \$420,412 awarded to NJCSTME and Computer Science grant co-PIs
 - supported the development of the DOE TRIO grants: Upward Bound Grant (\$267,600 per year for 4 years) to enhance skills and motivation necessary for post-high-school success, and Ronald E. McNair Grant (\$220,000 per year for 5 years) to prepare students in math and science for advanced degrees, awarded to NAHS and Mathematics grant co-PIs
 - supported the development of the NSF MRI grant submitted by Biology co-PIs for \$300,000 to purchase equipment for a Molecular Ecology Lab within the Department of Biological Sciences (currently being revised for resubmission in response to first round reviewers' feedback).
 - supported the development of NSF S-STEM (STEM Scholarship) grant submitted by Computer Science co-PIs for \$590,000 to establish a program entitled "Project ASK: Applying Student Knowledge for Success in Computer Science" (currently being revised for resubmission in response to first round reviewers' feedback).
 - supported the development of NSF BPC-DP grant (Broadening Participation in Computer Science Demonstration Project) entitled "Alliance for College Transition (ACT): Improving Faculty and Student Interaction and Dialogue on the Pipeline from Community College to University" submitted by Computer Science co-PIs for \$590,000 (currently awaiting reviewers' comments)
 - supported faculty from Geology/Meteorology and Mathematics to participate in the Garden State Consortium of NSF LS-AMP Project (Louis Stokes Alliance for Minority Participation)

- with \$400,000 expected as annual scholarship fund for Kean students for 5 years - project liaisons currently engaged in Consortium development.
- supported the institution of a scholarship in memory of the late Dr. Karen Stern, former Chair of the Department of Occupational Therapy, with \$14,400 in donations and pledges raised to date.
- supported Nursing faculty to participate in an interdisciplinary Robert Wood Johnson Foundation grant to address the issue of childhood obesity, currently being developed under ORSP
- **Supporting Department Chairs in upholding standards and enforcing policies**
 - supported Chairs and faculty in upholding standards and resolving student issues in a fair and resolute manner
 - encouraged departments to adopt systematic solutions to enforce academic policies and deadlines
 - arbitrated cases of grade grievance and academic dishonesty by upholding academic standards and enforcing policies on academic honesty
- **Promoting student support, recognition of student achievements and other activities for student success**
 - supported student presentations at national and regional conferences
 - supported student club activities (ACM, ACS, student AMS/NWA chapter)
 - supported the compilation of “Roadmap for Success in Science and Mathematics” to illustrate relationship and proper sequencing of courses for each option in STEM majors
 - initiated STEM students’ participation at Undergraduate Open House to greet and interact with prospective students and parents interested in NAHS programs
 - promoted special Z sections of Transition to Kean to enhance recruitment into STEM disciplines
 - encouraged and supported STEM faculty to attend First Year Experience Conferences to learn the best practice models for student engagement and support
 - supported the initiation of the Epsilon student awards, with students from NAHS and NJCSTME recognized for student research, leadership and team work
 - supported faculty and students to participate in the Spring 2007 annual meeting of the New Jersey Academy of Sciences held at Kean
 - supported a wide variety of events/conferences to support faculty and students in various disciplines (Annual New Jersey Earth Science Teachers Association Conference; Annual BSN/MSN Nursing Symposium; IUES public lecture series; ACM Club Computer Programming Contest; Kean University Faculty Research Forum; Biology Club and TriBeta Award Dinner; M.S. in Computing, Statistics, and Mathematics Graduate Symposia)
- **Seeking low-cost solutions to satisfy or alleviate critical resource needs**
 - Worked with the Department of Biological Sciences to facilitate new faculty donation of research equipment from previous employer (approximately \$180,000 in estimated value)
 - Secured and redistributed Pentium VI computer workstations and Dell laptops trickled down from other offices
 - Secured usable furniture pieces to enhance student study areas
 - Secured leased vehicle from Gear Up Grant to support field trips
 - Obtained the Administration’s approval to purchase two 12-passenger vans to support field-based courses

Project Director and Principal Investigator, NSF Epsilon Corps Grant, 2004 – present

- **Responsible for strategic planning and budget development and management** (\$224,168 for 2004-05; \$206,602 for 2005-06; \$175,841 for 2006-07; \$179,081 for 2007-08; \$181,241 for 2008-09, totaling \$966,933).
- **Working with grant co-PIs and members of the Epsilon Faculty Working Group to promote active participation** among faculty and students in science, mathematics and technology (STEM) programs (275 STEM students participated in SETM course and attitude surveys; a follow-up survey is currently being planned; about 150 students and faculty attended Epsilon Corps Opening Ceremony; about 50 students are engaged as Epsilon Tutors and Mentors; about 40-50 students participate in Epsilon Summer Institute each year).
- **Working with co-PIs and faculty participants to share experiences and learn best practices in STEM education at NSF STEP Grantee Conferences** (Attending 2006 and 2007 NSF conferences with co-PIs and grant participants, and presenting findings and results on grant operations).
- **Working with grant co-PIs and grant participants to promote PLTL (Peer Led Team Learning) and other tutoring/mentoring activities** (Activities include PLTL tutor-training workshop; PLTL sessions for critical courses in Computer Science, Math, and Biology ; MCAT review, Organic Chemistry Study Groups, Biochemistry Tutoring, and Anatomy & Physiology Study Groups, with several other projects to be launched soon pending the refinement of assessment tools).
- **Building a science student community and organizing Epsilon Student Association (ESA)** (Engaging all officials of STEM student clubs and representatives of MARS & NJCSTME students, organizing ESA official election, and composing task-oriented committees).
- **Planning and organizing Epsilon Corps campus-wide events** (including Science Celebration Day, Epsilon Summer Institute, Epsilon Field Trips and Epsilon Science Alumni Festival, with external keynote speaker, student project demonstrations, NAHS student research posters, and activities showcasing tutoring-mentoring opportunities, career connections, science student support services, student clubs and societies, and science outreach programs).
- **Conducting survey analysis to study STEM students' patterns and trends** not directly available from existing data and using the analysis to set goals and develop strategies to enhance STEM retention and recruitment (gathering specific data to analyze STEM students' attitudes toward STEM courses and their learning styles and behaviors).
- **Building synergistic relationships with existing STEM mentoring and outreach programs** such as MARS, Bridge, Upward Bound Project and WIST (coupling budgetary support to MARS with efforts to help MARS to double its participant pool and to collect assessment data; using existing channels of Bridge, Upward Bound Project and WIST to reach out to feeder school counselors and students).
- **Maximizing Epsilon Corps publicity in conjunction with Kean University's other initiatives** to attract more students to the University's STEM programs (Designing brochure and presentation materials, support STEM departments/programs to develop banners; reaching out to high school counselors, and presenting Epsilon Corps experiences at regional and national conferences).

Chair, External Library Task Force, 2004 – 2006

- **Working collegially with all 20 members of the Task Force** (9 faculty members, 6 administrators, 3 student representatives and 2 union observers) **and achieving unanimous agreement** on recommendations to enhance the library services and operations.
- **Applying the ACRL guidelines for college libraries and using examples from benchmark institutions** to evaluate the library's organizational structure, collection integration, service and infrastructure.
- **Conducting an extensive on-line library survey** to which 212 faculty/staff and 514 students responded.
- **Creatively promoting participation in the on-line survey by enlisting matching support from different sources** (the Student Organization and the Provost's Office).
- **Producing the Library Task Force Report and making a summary presentation to the Academic Policy & Personnel Committee of the Board of Trustees.**

President, Kean University Chapter, the Honor Society of Phi Kappa Phi, 2005 – June 2007
(President-Elect, 2003 – 2005)

- **Working closely with other Phi Kappa Phi officials to develop strategies and organize Chapter activities and events.**
- **Expanding the Phi Kappa Phi Student Term Paper and Project Contest** to establish new contest categories for science projects and arts projects.
- **Proposing and organizing “The DaVinci Code Symposium – the Confluence of Science, Art, Religion and Myth”**, a campus-wide interdisciplinary symposium, March 19, 2004
- **Organizing annual initiation events for students in Spring and for Faculty and Alumni in Fall**
- **Enhancing the visibility of the Honor Society and the image of Kean University** by initiating on-campus sale of honor items for members to wear at graduate and undergraduate commencements

IV. CURRICULAR DEVELOPMENT EXPERIENCES

- **Chairing the Curricular Committee, Dept. of Biological Sciences (2001 – 2002)** (Working intensively with the Chair and faculty members of the Dept. of Biological Sciences, I coordinated and guided the revision of the advisement guide sheets for 5 BA options and 2 BS options in Biology with reconfigured requirements for BA General Option and BS General Option, the approval of numerous course outlines in fulfillment of GELAP requirements, and the approval of several major biology courses).
- **Working with GE office to organize special Epsilon sections (Z sections) of Transition to Kean (formerly Freshman Seminar) and Research and Technology (GE 2024)** to enhance STEM recruitment and retention by enhancing regular curricular activities with co-curricular hands-on

exploration projects, intensive STEM skill building activities, and community building across all cohorts of STEM students).

- **Developing Honors Anatomy & Physiology I & II** (Bio 3433; 3434) (2000) (Bringing a more integrative and more interdisciplinary approach into the classroom and combining student classroom learning with independent research on challenging topics related to the course).
- **Working with Biology colleagues to design and develop new courses in Biology** (e.g., Bio 2400 Genes, Organisms and Populations, and Bio 4970 Seminar in Integrative Biology).
- **Providing input for the initial development of the biological components of the integrated science course for students in NJCSTME** (2003).
- **Providing input to numerous new GELAP course outlines** when serving on the General Education Committee (1999 – 2002).
- **Providing input to numerous course outlines and proposals** when serving on the Curriculum Committee of Dept. of Biological Sciences (1999 – 2006) and the College of NAHS Curriculum Committee (2000 – 2002).

V. RESEARCH & SCHOLARSHIP EXPERIENCES

• **External Grants for Research and Science Education**

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|---------|---|
| 2007-12 | Chinese Academy of Sciences Innovative Research Team Grant (grant participant, awarded to the Institute of Vertebrate Paleontology & Paleoanthropology) |
| 2004–09 | National Science Foundation (NSF) STEP Grant DUE-0431637: Epsilon Corps – Expanding STEM Talent Through Exploration, Mentoring and Sequenced Curricular Support (\$966,933) |
| 2004–06 | Outstanding Overseas Scholar Award (ca. \$50,000), the Chinese Academy of Sciences (Support for joint research in China) |
| 2002 | <i>Chunhui</i> (“Spring Sunshine”) Project Award (ca. \$8,000), the Chinese Ministry of Education (Teaching research-based Evolutionary-Developmental Biology at Peking University and Beijing Normal University, Beijing, China) |
| 2001 | National Geographic Society Grant for Field Exploration in Yunnan, China (\$20,000) (with M.M. CHANG & M. ZHU) |
| 1999 | Wong Kwan-cheng Visiting Scientist Grant, the Chinese Academy of Sciences (ca. \$4,000) |
| 1999 | Human Anatomy & Physiology Society (HAPS) Innovative Teaching Grant (\$745) (with S. CODELLA). |
| 1997 | Educational Partnership grant (\$20,000), A.D.A.M. Software, Inc. (Anatomy simulation software to enhance anatomy and physiology teaching at Kean) |

• **Peer-Reviewed Research Publications (totaling 15 including 4 joint papers in *Nature*)**

(Under Publisher’s Contract)

ELLIOTT, D., J. MAISEY, YU, X., and D. MIAO (eds). *Fossil Fishes and Related Biota: Morphology, Phylogeny and Biogeography – in Honor of Meemann Chang*. To be published by Verlag Dr. Friedrich Pfeil, Munchen, Germany (Targeted publication date 2008).

(In review)

ZHU, M., W. WANG & X. YU. *Meemannia eos*, a basal sarcopterygian fish from the Lower Devonian of

- China - expanded description and significance. In *Fossil Fishes and Related Biota: Morphology, Phylogeny and Biogeography – in Honor of Meemann Chang*. To be published by Verlag Dr. Friedrich Pfeil, Munchen, Germany (Targeted publication date 2008).
- 2006 ZHU, M., X. YU, W. WANG, W. ZHAO and L. JIA. A primitive fish reveals origin of cosmine in basal sarcopterygians. *Nature*. V.441, 77-80
- 2004 ZHU, M. and X. YU. Lower jaw character transitions among major sarcopterygian groups – a survey based on new materials from Yunnan, China. pp. 269-284. In *Recent Advances in the Origin and Early Radiation of Vertebrates*, Special Symposium Volume of the 62 Annual Meeting of the Society of Vertebrate Paleontology, ed. G. Arratia, R. Cloutier & M.V.H. Wilson. Verlag Dr. F. Pfeil, Berlin.
- 2002 ZHU, M. and X. YU. A primitive fish close to the common ancestor of tetrapods and lungfish. *Nature*. v.418:767-770 (August 15).
- 2001 ZHU, M. X. YU and P. AHLBERG. A primitive sarcopterygian fish with an eyestalk. *Nature* v.410, 81-84 (March 1).
- 1999 ZHU, M., X. YU and Ph. JANVIER. A primitive fossil fish sheds light on the origin of bony fishes. *Nature* v.379: 607-610 (February 18).
- 1998 YU, X. A new porolepiform-like fish, *Psarolepis romeri*, gen. et sp. nov. (Sarcopterygii, Osteichthyes) from the lower Devonian of Yunnan, china. *Journal of Vertebrate Paleontology* 18:261-274.
- 1998 BAKER, R., X. YU and R. DeSalle. Assessing the relative contribution of molecular and morphological characters in simultaneous analysis trees." *Molecular Phylogenetics & Evolution* 9:427-36.
- 1997 CHANG, M. and X. YU. Re-examination of the relationship of Middle Devonian osteolepids - fossil characters and their interpretations. *American Museum Novitates* 3189:1-20.
- 1995 FAN, W. and X. YU. (Chapter contributions) Yeast Artificial Chromosome (YAC) vector, Screening of DNA libraries, Liposome-mediate transfection, Transient expression in mammalian cells with Vaccinia VTF7-3, Mini-scale preparation of bacterial plasmid DNA, Large-prep of plasmid DNA by PEG precipitation, Isolation of YAC DNA, Extraction of genomic DNA from mammalian cells, Membrane protein extraction, Preparing cell lysate for protein detection, Immunoprecipitation, and Western blotting. In *Practical Protocols in Molecular Biology* (Y. Li and Y. Zhao, eds.). Science Press, Beijing and New York, 312 pp.
- 1985 CHANG, M., X. YU and Y. LIU. Studies of Early Vertebrate Fossils of China. In *Advances in Science of China: Earth Sciences* (G. Tu, ed.). pp. 87-119. Science Press, Beijing; John Wiley & Sons, New York.
- 1984 CHANG, M. and X. YU. Structure and significance of *Diabolichthys speratus* gen. et sp. nov., an early Devonian lungfish associated with *Youngolepis* from eastern Yunnan, China. *Proceedings of the Linnean Society of New South Wales*, 107(3):171-184.
- 1983 CHANG, M., M. CHOW and X. YU (eds.) *Translated Papers on Cladistics*. Science Press, Beijing, 209 pp. (In Chinese).
- 1981 CHANG, M. and X. YU. A new crossopterygian, *Youngolepis praecursor*, gen. et sp. nov., from Lower Devonian of E. Yunnan, China. *Scientia Sinica*, 24(1):89-97.

● **Peer-Reviewed Disciplinary Presentations, Symposia and Abstracts**

- 2005 “Morphology, Phylogeny and Biogeography of Fossil Fishes – A Symposium in Honor of Meemann Chang”. Co-Convenors X. Yu and J. Maisey. The 65th Annual Meeting of the Society of Vertebrate Paleontology, Phoenix, Oct. 19-22.
- 2002 “Lower jaw features of major sarcopterygian groups with new materials from China”. Joint presentation at the 62nd Annual Meeting of the Society of Vertebrate Paleontology, Norman, OK, Oct.8-12 (with M. ZHU).
- 2002 “Evolutionary-developmental biology”. Beijing Conference on Modern Zoology, Institute of Zoology, the Chinese Academy of Sciences. Dec. 23.
- 2000 "New materials of *Psarolepis* and related forms and their phylogenetic-biogeographic implications" Joint presentation at the 9th International Meeting on Early/Lower Vertebrate, Flagstaff, Arizona, May 15-19. (with M. ZHU)
- 1999 “*Psarolepis*: how do stem groups and different coding strategies affect osteichthyan phylogenies?” Invited presentation at the London International Conference on Major Events in Vertebrate Evolution, April 8-9
- 1997 "Using multimedia settings to enhance students' active learning." Presentation at 11th Annual Conference of the Society of Human Anatomy & Physiology (HAPS), Toronto, June 3.
- 1996 (Abstract) Position of Middle Devonian osteolepids and the assumed monophyly of Osteolepiforms.

- 56th Annual Meeting of the Society of Vertebrate Paleontology, New York. Oct.18. *Journal of Vertebrate Paleontology* 16(3) (supple.): 27A. (with M. CHANG)
- 1990 (Abstract) New sarcopterygian fishes from Lower Devonian of Yunnan and their impact on sarcopterygian relationships. *Journal of Vertebrate Paleontology* 10(3) (supple.): 51A.

● **General Presentations and Non-peer-reviewed Publications**

- 2006 "Epsilon Corps: Enhancing Success in the Sciences." Presentation at the Conference on Enriching the Academic Experience of College Science Students. University of Michigan, May 18-19.
- 2005 "Epsilon Corps promotes integrative learning through curricular innovation and community building". Workshop at the AACU 2005 national Network for Academic Renewal conference "Integrative Learning: Creating Opportunities to Connect", Oct. 18-22, Denver, CO. (with J. DOBOSIEWICZ)
- 2005 "Western Technology and Imperial China: Chinese Intellectuals' Failed Mission Against Western Conquest." Kean University Faculty Seminar on Comparative Cultures. March 24.
- 2005 Invited Workshop on Asian Culture for Employees of the Ocean County Superior Court, Tom River, NJ, Mar. 11.
- 2004 "Enhancing the theoretical value of scientific manuscripts: analyzing three Nature papers in paleontology and evolutionary biology". Presentation at the Institute of Vertebrate Paleontology and Paleoanthropology, the Chinese Academy of Sciences. July 9.
- 2004 "The Divine Proportion – seeking truth in Nature's beauty". The DaVinci Code Symposium –the Confluence of Science, Art, Religion & Myth, The Honor Society of Phi Kappa Phi, Kean University Chapter, Mar. 19.
2003. "The joy of discovery – from fossil fish to biodiversity". Presentation at the Honor Society of Phi Kappa Phi, Kean University Chapter, Jan. 23.
- 2002 "Turning dreams and aspirations into lifelong learning and commitment." Keynote speech at Honors Convocation, Kean University. Apr. 3.
- 2002 "Evolutionary-developmental biology – the meeting ground between paleontology and neontology". Peking University, China. Oct. 11.
- 2001 "The joy of discovery - digging up our evolutionary past." Keynote address at the New Jersey Academy of Sciences. Apr. 7.
- 1999 Evolutionary-Developmental Biology: a new hybrid discipline for studying the origin of biodiversity. *"Science"* ("Kexue" a Chinese bimonthly science journal). 51(5): 14-18. (with ZHU, M. in Chinese with English abstract).
- 1999 "Reinforcing Connections in A & P: Designing & Creating an Integrated Self-Study Environment", Poster presentation, 13th Annual Conference of the Society of Human Anatomy & Physiology (HAPS), Fort Worth, Texas. (with S. CODELLA).
- 1998 "Molecular vs. Morphological Data for Phylogeny Reconstruction." Presentation at New Jersey Research Consortium, Kean University, Mar. 27.
- 1998 "Using Fossils and DNA to Reconstruct Evolutionary Relationships." Seminar at Brookdale Community College, NJ, Mar. 12.
- 1997 "Technology in the classroom: a low-budget workshop series." New Jersey Faculty Development Network 8th Annual Conference, Bloomfield College. Apr. 11 (with R. LEMEL)

VI. TEACHING EXPERIENCES

A total of 23 different courses, ranging from medical school course for orthopedic residents to lower-division courses for undergraduate students:

- 1994 – present **Kean University**
Anatomy & Physiology (I, II); Honors Anatomy & Physiology (I,II); Invertebrate Zoology; Senior Seminar; Independent Research; Transition to Kean (special Epsilon section).

- 2002 **Peking University**
Evolutionary-developmental Biology (combined undergraduate and graduate course).
- 2002 **Beijing Normal University**
Graduate Seminar on Evolutionary-Developmental Biology.
- 1995 – 2001 **School of Graduate Medical Education, Seton Hall University** (Orthopedic Resident Program at St. Joseph's Hospital & Medical Center).
Basic Orthopedic Science
- 1991 – 1994 **College of New Rochelle**
Human Anatomy & Physiology; Vertebrate Comparative Anatomy; Behavioral Ecology of the Vertebrates; Developmental Biology (Embryology); Evolution; Science and Society (Honors Colloquium); General Biology; Concepts in Biology; Human Organism; Human Ecology; Biocommunication Seminar Series; Independent Research.
- 1986 – 1997 **Yale University**
Introductory Biology I, II (Summer Program) 1989 – 1997
Intermediate Chinese 1986 – 1989

VII. COMMITTEE EXPERIENCES

College & University Committees:

- 2004 – 2007 Faculty Senate; Executive Council (2004 – 2005)
- 2004 – 2006 External Library Task Force (Chair)
- 2003 – 2006 Institutional Research Review Board
- 2001 Search Committee for Assistant Vice-President for International Studies (Co-Chair)
- 2000 – 2003 Untenured Faculty Research Initiative Committee (UFRI)
- 2000 – 2001 NAHS Retention & Tenure Committee
- 1999 – 2002 General Education Committee (Chair, 2000)
- 1999 – 2000 Middle States Self-Study Team. Convener: Students Advisement Group
- 1998 – 2002 Executive Council, Kean University Federation of Teachers (KFT)
- 1997 – 1999 NAHS Curriculum Committee
- 1997 KFTC Education Policy Committee
- 1996 – 1999 Senate Technology Committee (previously College Information Technology Committee)
- 1996 – 1999 Coordinating Committee, Untenured Faculty Organization (UFO)
- 1996 – 1999 Kean Instruction Team (KIT) (Organizing 10 workshops focusing on instructional technology, integration of pedagogy with instructional technology, integration of teaching and scholarship, and students' active learning).
- 1996 – 1998 Senate Library and Educational Media Committee
- 1995 – 1996 Senate GE Committee. Chair, Subcommittee #4 on Coherence and Cohesiveness
- 1995 – 1996 Senate Support Service Committee
- 1995 – 1996 Senate Representative, College Bookstore Committee
- 1994 – 2006 NAHS Pre-medical Advisory Committee
- 1994 – 1995 Senate External Education Committee
- 1993 – 1994 Faculty Development Committee, College of New Rochelle, NY.
- 1992 – 1994 Honors Program Board, College of New Rochelle, NY.
- 1992 – 1994 Premedical Program Committee, College of New Rochelle, NY (Chair) (Directing the Summer Pre-Medical Externship Program at College of New Rochelle & Lawrence Hospital, supervising program operations by coordinating participating physicians and nurses and directing the academic components of the program.)

Selected Departmental Committees: Personnel Relation Committee (Chair 2003 – 2006); Curriculum Committee (Chair, 2001); Research & Creative Works Committee (Chair); Grievance Committee (Chair);

Multimedia and Technology Committee (Chair); Social Committee (Chair); Coordinator, Anatomy & Physiology courses (1994 – 2006)

VIII. HONORS AND AWARDS

2005 2005 Teacher of the Year. Kean University Alumni Association.
2005–06 Quality First Initiatives Award: Speakers/Artists/Writers Series, Kean University.
2004–05 Quality First Initiatives Award: Enhancing Human Physiology Teaching Infrastructure, Kean University (\$11,030).
2004 Presidential Excellence Award for Distinguished Teaching, Kean University.
2001 Presidential Excellence Award for Distinguished Scholarship, Kean University.
1999 – present Fellow, the Linnean Society of London.
1995–06 Kean University Released Time Awards for Research & Creative Works (RTR).
1995 Kean University Alumni Association Award (\$5,000)
1993 Faculty Development Fund for Summer Research, College of New Rochelle (\$3,000).

IX. PROFESSIONAL RECOGNITION & SOCIETIES

2005 – present National Science Foundation (NSF) STEP Proposal Review Panel (Science, Technology, Engineering, & Mathematics Talent Expansion Program).
2004 – present International Editor, *SVP News Bulletin* (Society of Vertebrate Paleontology).
2002 – present The Chinese Academy of Sciences Overseas Expert Assessor (Referee for Project Reviews).
2001 – present Reviewer, *Nature*, London.
1999 – present Research Associate, Institute of Vertebrate Paleontology & Paleoanthropology, the Chinese Academy of Sciences, Beijing.
1996 – present Research Associate, American Museum of Natural History, NY.
1999 – present The Honor Society of Phi Kappa Phi
1997 – 2002 Society of Human Anatomy & Physiology (HAPS) (Chairing the Software Review Subcommittee of the Technology Committee).
1995 – present New Jersey Academy of Sciences
1991 – 1994 Sigma Xi Society
1990 – present Society of Vertebrate Paleontology (SVP)
1988 – 1996 American Translators Association (ATA)