

# Jennifer Moon

#### Work:

NMS 2.104 205 W. 24th St. Mail Code: A6700 University of Texas-Austin Austin, TX 78712 512.232.4011

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# **Current Position**

Lecturer, School of Biological Sciences, University of Texas-Austin.

# **Teaching Experience**

## Courses Taught at the University of Texas-Austin, TX (Spring 2007 - present)

BIO 311C Introductory Biology I. Fall 2007, Spring 2008, Fall 2010

BIO 344 Molecular Biology. Fall 2007, 2008, Spring 2009, 2010, Fall 2010, 2011, 2013

BIO 349L Experiments in Animal Developmental Biology. Spring 2009, 2010, 2011, 2012

BIO 315H Advanced Introduction to Genetics. Fall 2009 (Co-taught with Dr. Ruth Buskirk)

BIO 325 Introduction to Genetics. Fall 2008

BIO 311D Introductory Biology II. Spring 2008, 2011, 2012

BIO 328 Plant Physiology. Spring 2007

BIO 320L Cell Biology Laboratory. Fall 2011, 2012, 2013

UGS 303 Critical Thinking for the 21st Century. Fall 2012, 2013

## **Research Experience**

## Postdoctoral Researcher, University of Texas-Austin, TX - Feb 2005-Jan 2007

Research project: Identification and characterization of DNA targets of the transcription factor PIF1 in *Arabidopsis thaliana* 

## Graduate Student, Indiana University, Bloomington, IN - Jul 1997-Dec 2004

Dissertation Title: Characterization of CUL1 and CUL2: Subunits of SCF E3 Ubiquitin Ligases in *Arabidopsis thaliana* 

## Research Assistant, Pioneer Hi-Bred, Johnston, IA - Jun 1995-Jul 1997

Research project: Development of new methods to identify advantageous genes using a forward genetics approach in *Mutator* populations of *Zea mays* 



## **Education**

Indiana University, Bloomington, IN - Ph.D. (Molecular, Cell and Developmental Biology/Plant Biology minor), 2004. Advisor: Dr. Mark Estelle, presently at the University of California-San Diego.

Grinnell College, Grinnell, IA - B.A. (Biology), 1995. Advisor: Dr. Leslie Gregg-Jolly

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## **Publications**

- J. Moon, L. Zhu, H. Shen, and E. Huq (2008) PIF1 directly and indirectly regulates chlorophyll biosynthesis to optimize the greening process in Arabidopsis Proceedings of the National Academy of Sciences 105 (27): 9433
- J. Moon, Y. Zhao, X. Dai, W. Zhang, W. Gray, E. Huq, M. Estelle (2007) A new CUL1 allele shows altered response to hormones and light in Arabidopsis thaliana. Plant Physiology, 143: 684
- H. Shen, J. Moon, E. Huq (2005) PIF1 is regulated by light-mediated degradation through the ubiquitin-26S proteasome pathway to optimize photomorphogenesis of seedlings in Arabidopsis. Plant Journal 44 (5): 1023
- J. Moon, G. Parry, M. Estelle (2004) The ubiquitin-proteasome pathway and plant development. Plant Cell 16: 3181

# Manuscripts in preparation

J. Moon, H. Hellmann, M. Estelle CUL2, a gene highly homologous to CUL1, has limited function in Arabidopsis thaliana.

#### **Patents**

"Compositions and Methods for Modification of the Gravitropic Response of Plants" (1998) Serial No. 60/075,057 provisional application submitted (since withdrawn).

# Scholarships, Grants and Awards

#### **Current position**

**2012 Natural Science Council Faculty Service Award in the College of Natural Sciences, UT- Austin:** Given in recognition of exemplary service to students in the College of Natural Sciences.

**2011 UT College of Natural Sciences Teaching Excellence Award in the School of Biological Sciences:** The award recognizes professors within the College of Natural Sciences for their dedication to students and passion for teaching.



#### 2011 UT College of Natural Sciences Science Outreach Award Honorable Mention:

The award recognized greenseedling.com for its efforts in promoting the plant sciences.

**2010** and **2011 AAAS Early Career Award for Public Engagement with Science finalist:** Nominated by the American Society of Plant Biologists (ASPB), principally for work on greenseedling.com. Award recognizes early-career scientists and engineers who demonstrate excellence in their contribution to public engagement with science activities.

**2009 Professor of the Year Award nominee:** Sponsored by the Faculty Affairs Committee of the Senate of College Councils and the Natural Sciences Council. The award recognizes professors on campus for their dedication to students and passion for teaching, particularly those that are an "exemplary professor in the classroom, but also a true mentor and friend outside class."

American Society of Plant Biologists (ASPB) Education Foundation Grant Award Program (GAP). \$15,000 awarded for the development and expansion of <a href="https://www.greenseedling.com">www.greenseedling.com</a>. (2008-2013)

**UT-Austin Undergraduate Research Fellowship (URF), University Cooperative Society.** Faculty advisor for \$1000 undergraduate grant to Andrea John for research on gravitropism and light interaction in seedlings. (Spring 2009)

**UT-Austin Undergraduate Summer Research Grant, College of Natural Sciences.** Faculty co-mentor for \$2500 undergraduate grant to Andrea John for summer research on gravitropism and light interaction in seedlings. Co-mentor with Dr. Enamul Huq. (Summer 2008)

## **Graduate School**

NIH Genetics Training Grant (1997-1999) Pioneer Hi-Bred, Intl. Fellowship (1999-2000)

# **Conference Presentations**

- J. Moon, L. Zhu, H. Shen, E. Huq. (2006) The light-regulated transcription factor PIF1 controls chlorophyll biosynthesis pathway genes to optimize seedling photomorphogenesis. 17th International Conference on Arabidopsis Research, June 28-July 2, Madison, Wisconsin (Abstract #404)
- J. Moon, S. Dharmasiri, N. Dharmasiri, S. Mooney, H. Hellmann, M. Estelle. (2003) Function and Regulation of SCFTIR1 in Arabidopsis: An E3 Required for Plant Hormone Action. 7th International Congress of Plant Molecular Biology, June 23-28, Barcelona, Spain (Abstract #W06-3)
- H. Hellmann, J. Moon, M. Estelle. (2001) Auxin Signal Transduction and the Cullin Gene Family. 12th International Conference on Arabidopsis Research, June 23-27, Madison, Wisconsin (Abstract #275)

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# **Invited Scholarly Talks**

J. Moon, S. Dharmasiri, N. Dharmasiri, S. Mooney, H. Hellmann, M. Estelle. (2003) Function and Regulation of SCFTIR1 in Arabidopsis: An E3 Required for Plant Hormone Action. 7th International Congress of Plant Molecular Biology, Barcelona, Spain

# **Invited Academic Talks**

Science Teacher Leader Professional Development, Invited Speaker (Spring 2013): Presented plant biology seminar for about 30 elementary science teacher leaders in the Leander Independent School District as part of a continuing education workshop.

**Discovery Learning Luncheon Seminars, UT-Austin Invited Speaker (Spring 2012):**Co-presented with colleagues Drs. Ruth Buskirk, K. Sathasivan. Seminar entitled "Biology Course Transformation Project at UT Austin" summarized current experiences in the pilot vear of the Course Transformation Project to university faculty and educators.

**Life Sciences Institute Invited Speaker (Spring 2012):** Speaker in public seminar series for K-12 teachers, parents, and community members. Seminar entitled "Why Plants are Cool" given in Leander, TX and sponsored by the LISD Science Department.

**Explore UT Participant/Lecturer (Spring 2010, 2011, 2012):** Presented lecture "The fascinating world of plants" to a public audience at the annual 'open house' Explore UT event.

**Dean's Scholars Invited Speaker (Spring 2010, Fall 2011):** Presented research update on my lab's work on gravity and light genetic cross-talk in Arabidopsis to Dean's Scholars students and faculty.

**Women-in-Science Invited Speaker (Fall 2010):** Presented talk on 'challenges and rewards of being a woman in science' to an undergraduate audience.

# Academic Service, Consulting, and Community Work

**Faculty Team Member, Course Transformation Project for Biology at UT-Austin. (2011-present)** Co-authored and received \$300,000 in-house grant from the Center for Teaching and Learning. Co-authors include: Project Lead, Dr. K. Sathasivan, with colleagues Drs. Ruth Buskirk, Anita Latham, and Marty Maas. The goal of the three year project is to redesign the two Majors Intro Biology courses to increase student-centered learning and to promote student retention and engagement using the "flipped classroom" approach.

Advisor on McGraw-Hill Publishing Biology Advisory Board (Spring 2012-present): Responsible for overseeing the content development of an online education resource for a Majors Biology preparatory course.

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Advisor on Wiley Publishing Biology Advisory Board (Spring 2011-present): Assisted in the development of a education resource for a Majors Biology course.

**Webmaster of www.greenseedling.com** (Fall 2006-present): Created and maintain a plant biology website covering recent topics and resources for the plant enthusiast. Supervise the work of five undergraduate assistants who contribute weekly to the site.

**Textbook Reviewer, Various Publishers (Fall 2008-present):** Reviewer for selected chapters in Biology, 2nd ed by Robert J. Brooker, published by McGrawHilll. Reviewer for selected chapter in Biology: The Dynamic Science by Russell/ Hertz/McMillan, published by Cengage Learning.

**Plan II Honors Sophomore Advising (Spring 2009-present):** Advise Plan II Honors students to discuss academic interests and goals, as part of the students' program requirements. Discussion ranges from offering directions for majors and concentrations, thesis topics (a thesis is required of all Plan II students), opportunities for post-graduate education, and careers.

**Student Organization Advisor (Fall 2008-2011):** Faculty advisor for a student-run campus group ("FUZE") that promotes undergraduate participation in community service (Habitat for Humanity, tutoring, hospital/nursing home visits, etc). Responsibilities include meetings with officers, supporting group aims, resolving conflicts and overseeing financial management.

Committee Member, American Society of Plant Biologists (ASPB) website redesign committee (2009-2010): Met monthly to discuss creative and technical decisions regarding the redesign of the ASPB website resign. New site launched September 2010.

**Podcasting 101 (Round Rock, TX July 2006)**: Taught a two-hour introductory podcasting class at the Round Rock Public Library as part of an adult continuing education program. Podcasts are free internet radio programs.

Marathon Training Coach for USA FIT - Austin (Fall 2000-Spring 2002): Trail leader/coach responsible for leading 10-20 people on paced, weekly long runs providing motivation and encouragement.

# Additional teaching experience

**Discussion Moderator, BioMeet: Extracurricular Biology Discussion Group (2008-2009):** Co-moderated a weekly discussion group for undergraduates interested in learning more about topics covered in Introductory Biology and Genetics. Students choose topics and post reading materials online for group discussion. ~15-20 students participated. Co-moderator: Dr. Stuart Reichler.

Graduate Teaching Associate, University of Texas-Austin, TX (Fall 2001):

Genetics and Evolution, with Dr. Mark Estelle. Responsible for all grading and exam preparation sessions. Discussion leader, five discussion sections per week.

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## Discussion Leader, Scientist Biographies Book-club (Fall 1997-Spring 1998):

Organized and led weekly discussions for an informal book-club comprised of 10-15 graduate students at Indiana University-Bloomington. Received departmental funding to purchase some reading materials.

# **Professional Organizations**

American Society of Plant Biologists (ASPB) (2007 - present)

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