

PROMOTION RECOMMENDATION  
The University of Michigan  
College of Literature, Science, and the Arts

Approved by the Regents  
May 14, 2009

Matthew R. Chapman, assistant professor of molecular, cellular, and developmental biology, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of molecular, cellular, and developmental biology, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	1998	Indiana University
B.S.	1993	University of Nebraska at Omaha

Professional Record:

2003 – present	Assistant Professor, Department of Molecular, Cellular, and Developmental Biology, University of Michigan
1999 – 2003	Postdoctoral Fellow, Washington University at St. Louis

Summary of Evaluation:

Teaching – Professor Chapman has proven to be an extremely talented and effective teacher who has introduced educational innovations and curricular reforms into his courses. He takes his role as an educator seriously, participating in intramural and extramural organized events and discussions on teaching that have emphasized diverse teaching approaches. He is highly sought after by students at all levels and their evaluations of his courses are some of the highest in the Department. In addition, his specialty course, Microbial Genetics, has become one of the largest elective specialty courses in the Department.

Research – Professor Chapman has emerged as a leader in the field of functional amyloids, a class of proteins that have considerable significance in basic molecular biology and applied biomedical science. He has carved out a unique niche in the highly competitive field of protein folding and his work has resulted in major advances in our understanding of this system. His published work is considered to be of extremely high quality and notable for his multidisciplinary approaches. He has successfully obtained external funding to support his research program and he has received more than 21 invitations to present his work nationally and internationally.

Recent and Significant Publications:

- “The molecular basis of functional bacterial amyloid polymerization and nucleation,” with X. Wang, *Journal of Biological Chemistry*, 283, 2008, pp. 21530-21539.
- “Polymerizing the fibre between bacteria and host cells: the biogenesis of functional amyloid fibres,” with E. A. Epstein, *Cellular Microbiology*, 10, 2008, pp. 1413-1420.
- “The curli nucleator protein, CsgB, contains an amyloidogenic domain that directs the polymerization of CsgA,” with N. D. Hammer and J. C. Schmidt, *Proceedings of the National Academy of Science, US*, 104, 2007, pp. 12494-12499.
- “Curli biogenesis and function,” with M. Barnhart, *Annual Review of Microbiology*, 60, 2006, pp. 131-147.

Service – Professor Chapman has served on several important departmental committees, including the Executive Committee, the Seminar Committee, and the committee to revise the Introductory Biology courses, among others. His is an active and positive participant in the professional life of the Department.

External reviews:

Reviewer (A)

“What particularly impresses me about Matt’s work is the interplay between genetics and biochemistry. His ability to take multiple approaches has allowed him to gain insight into what is a very complex biological pathway. ... He has everything we would like to see: he has developed a field, and while pushing it forward, has obtained significant external grant support, has published in excellent journals, and trained graduate students. I believe his record points to a bright and productive future.”

Reviewer (B)

“He is the leader in this important area that not only is fundamentally interesting, but also is critically important from the perspective of human health... ...[Chapman’s] talks are excellent and thought provoking, and it is clear that his research continues to get better and more creative... ...[Chapman] has the focus and insight to remain a leader, if not the leader.”

Reviewer (C)

“...Dr. Chapman is also a solid citizen of the scientific community. He seems engaged in promoting scholarship and the fact that ‘science matters’ at the local, national and international levels. ...I think everyone working on topics related to his perceive him as a valuable resource. ...Chapman displays all the positive qualities one expects of, and hopes for, in a scholar and colleague.”

Reviewer (D)

“...Chapman has made great progress in resolving the mechanism of production of the unique and biologically important curly amyloid... With a full tool-kit of genetics, biochemistry, and biophysics, he has undertaken a broad and insightful dissection of the system. His data are very solid and his papers beautifully crafted.”

Reviewer (E)

“He is probably doing the best work today on studying how cells control production and assembly of functional amyloids. ... His studies are incisive, use multiple approaches and are groundbreaking. ... He is articulate, passionate, uniquely positioned to become a major voice in one of the most important research areas today, and a strong advocate for undergraduate education...”

Reviewer (F)

“Matt has demonstrated diverse interests and is gifted at blending different disciplines together to investigate intellectually challenging problems. Matt is the most talented investigator [of his generation] that I know. He is a superstar and has everything it takes to thrive in this competitive environment.”

Summary of Recommendation:

Professor Chapman has emerged as a leader in his field. He is an outstanding teacher and has performed important service. The Executive Committee and I recommend that Assistant Professor Matthew R. Chapman be promoted to the rank of associate professor of molecular, cellular, and developmental biology, with tenure, in the College of Literature, Science, and the Arts.



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Terrence J. McDonald  
Arthur F. Thurnau Professor,  
Professor of History and Dean  
College of Literature, Science, and the Arts

May 2009