

Fulbright College of Arts and Sciences Department of Biological Sciences Michael Lehmann, Ph.D.

Associate Professor
629 Science-Engineering Building
Fayetteville, Arkansas 72701-1201
(44)(501) 575-3251 3688
(501) 575-4010 (FAX)

Email: mlehmann@uark.edu

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RE: Dr. Kirst King-Jones's application for a faculty position

To Whom It May Concern:

It is my great pleasure to write a strong letter of support for Dr. Kirst King-Jones's application for a faculty position at your institution. I had the privilege of closely following Dr. King-Jones's scientific career over the past 16 years, first as his advisor and later as one of his peers. Dr. King-Jones conducted work for his diploma and doctoral thesis under my direct supervision when I was a postdoc in the laboratory of his graduate advisor Prof. Günter Korge. Together, we are co-authors on three publications that resulted from work completed during this time. From 1999 to 2002 we both worked in the laboratory of Prof. Carl S. Thummel (Department of Human Genetics, Howard Hughes Medical Institute, University of Utah) on independent postgraduate research projects. After I left the Thummel laboratory in 2002 to start an Associate Professorship at the University of Arkansas, I have continued to follow Dr. King-Jones's research. His work resulted in an outstanding publication that recently appeared in CELL and will shortly lead to another publication in a similarly highly ranked journal.

When I first met the student King-Jones, he stood out from his classmates because of his open and inquisitive mind, his unquenchable thirst for scientific discussion and his quick grasp of scientific concepts. He proved to be a dynamic and skillful experimenter in the laboratory. He also distinguished himself from most other students by his excellent communication skills, both in oral and written form. He convinced with a brilliant defense of his doctoral thesis and graduated with "summa cum laude", the highest possible grade. In his thesis, he characterized the *Drosophila* ortholog of the transcription factor AP-4 and the role of this protein in tissue-specific gene regulation by the steroid hormone 20-hydroxyecdysone. I can testify that Dr. King-Jones was able to overcome seemingly insurmountable problems in demonstrating a role of AP-4 in steroid-controlled gene expression. Under these difficult circumstances he proved to have all the virtues of a successful researcher, including endurance, resourcefulness, and intellectual independence.

Dr. King-Jones's interest in steroid-controlled gene expression brought him to the leading laboratory in the field of steroid hormone action in *Drosophila*, led by the Howard Hughes investigator Prof. Carl S. Thummel. During his years in the Thummel laboratory Dr. King-Jones not only completed his technical repertoire and conducted extraordinarily successful research projects but also perfected the conceptual ability to develop his own research projects.

Where others would have been at the limit of their capacities, Dr. King-Jones took on the formidable task of studying not only one but two of the, at that time, uncharacterized nuclear receptor genes of *Drosophila*, *DHR4* and *DHR96*. He generated and examined mutants for the two genes, revealing unexpected functions for both genes in the coordination of metabolic and developmental pathways. He has published his work on *DHR4* in an article in CELL and will shortly publish an equally outstanding manuscript about his work on *DHR94*. Dr. King-Jones has not only generated mutants for *DHR94* but also transgenic lines that allow him to misexpress *DHR94* and *DHR4* in different tissues and at different times in development. In addition, he has produced a wealth of microarray data that has revealed gene networks controlled by the two genes. He has thus laid the groundwork for independent work in his own laboratory for years to come! I have had the chance to read the unpublished *DHR94* manuscript and Dr. King-Jones's current research proposal. The work that he lays out for his own laboratory is directed towards elucidating regulatory mechanisms that interconnect metabolic and developmental pathways, arguably one of the hottest topics in current biomedical research. I predict that he will be able to obtain major extramural funding for his proposed research.

I have also had the chance to experience Dr. King-Jones as a teacher at the Free University Berlin in an upper-level class in cell and molecular biology. I can testify that he has a natural talent to convey complicated scientific concepts. His enthusiasm for science was contagious for everybody attending the class. I predict that he will not only excel in research but also in the area of teaching. His open-mindedness and excellent communication and social skills will undoubtedly make him a popular and effective teacher.

In conclusion, I can highly recommend Dr. King-Jones for a faculty position at one of the best academic institutions. His research is highly fundable, and I have no doubt that he will continue to be highly successful as a researcher and a teacher. Please feel free to contact me any time if you have questions or require additional information.

Sincerely,

Michael Lehmann, Ph.D.

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Associate Professor