

CALIFORNIA INSTITUTE OF TECHNOLOGY

Division of Chemistry and Chemical Engineering, 127-72
Pasadena, CA 91125

Jacqueline K. Barton
Arthur and Marian Hanisch Memorial Professor
Arnold and Mabel Beckman Laboratory of Chemical Synthesis

Phone (626) 395-6075
FAX # (626) 577-4976
jkbarton@caltech.edu

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Professor Yves Brun,
Systems Biology/Microbiology Faculty Search,
Department of Biology,
Indiana University,
Jordan Hall 142, 1001 E 3rd St,
Bloomington IN 47405-7005

Dear Professor Brun:

Duncan Odom, currently a Sloan Postdoctoral Fellow in the laboratory of Richard Young at the Whitehead Institute, has applied for a faculty position with you and has asked that I write to you on his behalf. I am very happy to recommend him to you.

Duncan obtained his Ph.D. in nucleic acid chemistry working in my research group. He joined my group with a raw creativity and enthusiasm for carrying out research. During the course of his studies here, I watched Duncan develop an excellent sense of discipline and of thinking through a problem deeply. Duncan has now really blossomed into an outstanding and thoughtful scientist. His has been a remarkable and exciting evolution. He has the perspective of a biologist as well as a chemist, and with an enormous creative sense to utilize all he has learned.

In his research here, Duncan first showed that a metal complex designed in our lab could inhibit binding by a transcription factor site-specifically. While carrying on this work, however, he became interested also in participating in the DNA electron transfer studies being carried out in the group. Toward that end, in a very complete, detailed, and quantitative fashion he compared long-range oxidative damage between DNA and RNA. He then went on to characterize oxidative damage through charge transport in alternate nucleic acid assemblies, such as Holliday junctions and double crossover molecules. Again, the work was carefully and thoroughly done. The work

on multiple stranded double crossover molecules, in particular, showed a high level of creativity in his experimental design and this work may hold important implications in the application of DNA in nanoscale electronic devices. But these studies, too, were insufficient to quench Duncan's enthusiasm. He then went on to examine the sequence-dependence of long-range charge transport in DNA and developed new, clever assays to test for the oxidative repair of thymine dimers. As a result, he co-authored papers on each of these topics. He was enormously productive and highly motivated. Most importantly, he always provided a creative spark to ask the right question and an innovative approach to find the answer.

Duncan has a zest for learning and for becoming involved intellectually and experimentally in all aspects of research. He relishes taking on new problems and questions. He was very much a leader in the group. His postdoctoral work, as well as his proposed future studies, differs considerably in methods and topic than his graduate work, yet here too Duncan has shown he can be highly successful. Duncan has an outstanding ability to master new tools and perspectives and harness them effectively to get results.

I can, therefore, recommend Duncan Odom to you in strong terms. He is a truly outstanding nucleic acid chemist with enormous creativity and boundless enthusiasm for doing research. With his postdoctoral training, he is powerfully situated to make important contributions at the interface of chemistry and biology. He would, moreover, make an outstanding colleague. I urge you to interview him and see for yourself.

Please don't hesitate to call with any additional questions.

With best wishes,

Sincerely,

Jacqueline K. Barton
Arthur and Marian Hanisch
Memorial Professor of Chemistry