

Darrell Kotton, MD: Mentoring Statement 2012

My approach to mentoring in my laboratory involves earned autonomy for the trainee, and my belief that the essential ingredient in a successful training environment is a laboratory filled with ethical, self-motivated individuals who love the scientific method and are made to feel comfortable in questioning and debating their PI and each other. Hence I keep in mind 3 guiding principles when mentoring research trainees: 1) a rigorous scientist thinks independently and thrives on questioning everything, including the existing literature, one's own PI, and indeed oneself most of all; 2) a successful scientist employs rigorous methodology with intense attention to positive and negative controls above all, and presents data and interpretations with intense attention to precision of language without over-interpretation or hyperbole, and 3) scientific advances are for all mankind and thus all academic scientific discoveries, tools, and reagents should be shared with others free of charge and without restriction or exclusivity—an approach I call 'Open Source Biology.' New trainees typically plan their projects together with me through an initial period of reading and open conversations. Careful attention is paid to ensure that a successful project can potentially lead to a gradually independent career identity and independent research funding for the trainee over several years.

I have mentored four Pulmonary Fellows in my laboratory, each with their own individual project designed to allow future career development into independence, if desired. Three of my fellows, Andrew Wilson, Finn Hawkins, and Sara Greenhill, have won first prize at the statewide Massachusetts Thoracic Society science abstract competition for their projects. Andrew Wilson has also won first prize in our Department of Medicine's research abstract competition (Evans Days) and won Second Prize at the New England Respiratory Research competition. My PhD Graduate Student, Constantina Christodolou won 2nd prize for her research in the Graduate Program in Genetics and Genomics, and another graduate student, Chris Ford, won 2nd prize in the Evans Days competition. I am most proud of 2 of my postdoctoral laboratory trainees who are now Assistant Professors with their own laboratories and their own funded grants: 1) Andrew Wilson has won 3 grants, including 2 mentored grants (K08 and FAMRI), and 2) Laertis Ikononou has been awarded his R01—both have chosen to stay at BU and open their labs adjacent to mine, sharing common space and a wonderful, collaborative tri-partite approach to managing a research program in Lung Regenerative Medicine.

I have also mentored two faculty members that I helped to recruit to Boston University: Gustavo Mostoslavsky (GI) and George Murphy (heme-onc). I met these two individuals when we were postdoctoral fellows together at Harvard and I have been privileged to help recruit them to our BU Department of Medicine, and have helped them begin their laboratories, obtain NIH funding, and together the 3 of us have begun a new BU center, the Center for Regenerative Medicine (CReM).

Research Trainees:

<u>Name</u>	<u>Position at time of Training</u>	<u>Current Position</u>
Andrew Wilson, MD (2004-2010)	Pulmonary Fellow	Assistant Professor, BU
Laertis Ikononou, PhD (2009-2011)	Postdoctoral Fellow	Assistant Professor, BU
Asha Anandaiah, MD (2005-06)	Medical Resident	Instructor, Harvard
Sara Greenhill, MD (2006-2008)	Pulmonary Fellow	Interventional Pulmonologist
Tyler Longmire (2007-2011)	Graduate Student	Postdoc Fellow, Millenium
Constantina Christodoulou (2008-2011)	Graduate Student	Postdoc, Harvard
Christopher C. Ford (2008-current)	Graduate Student	Graduate Student, BU
Aba Somers, MD (2008-2010)	Pulmonary Fellow	Attending Pulmonologist
Finn Hawkins, MD (2010-current)	Pulmonary Fellow	Pulmonary Fellow, BU
Bradley Phelan, PhD (2010-current)	Postdoctoral Fellow	Postdoctoral Fellow, BU
Maria Serra, PhD (2011-current)	Postdoctoral Fellow	Postdoctoral Fellow, BU
Mohamed Jamal, DDS, PhD (2012-current)	Postdoctoral Fellow	PostdoctoralFellow, BU

Pulmonary Clinic (outpatient) Trainees:

Sara Greenhill (2005-2007)
Christina Anderlind (2006-2009)
Melissa Tukey (2010-current)
Hector Marquez (2010-current)

Junior Faculty Mentees:

Gustavo Mostoslavsky
George J. Murphy