

Core competencies self-assessment checklist

Modified from National Postdoctoral Association (NPA)

Rate your current level of development in each of the following, with 1 being 'needs attention' and 5 being 'extremely competent'. For more information see www.nationalpostdoc.org/?SixCoreComps

1	DISCIPLINE-SPECIFIC CONCEPTUAL KNOWLEDGE	1	2	3	4	5	n/a
	Analytical approach to defining scientific questions						
	Design of scientifically testable hypotheses						
	Broad-based and cross-disciplinary knowledge acquisition						
	Detailed knowledge of specific research area						
2	RESEARCH SKILL DEVELOPMENT						
	Research techniques and laboratory safety						
	Experimental design						
	Data analysis and interpretation						
	Effective search strategies and critical evaluation of literature						
	Grant application and scientific publishing processes						
3	COMMUNICATION SKILLS						
	Writing						
	• Scientific publications						
	• Curriculum vitae, resume, cover letters, teaching statements						
	Speaking						
	• Presenting research to scientific and lay audiences						
	• Conference and seminar presentations						
	• Job interviews and job talks						
	Teaching and mentoring						
	Special situations (networking, managing the news media)						
4	PROFESSIONALISM						
	Workplace: connecting with the immediate working team						
	Institutional: connecting with the research infrastructure						
	Collegial: connecting with the discipline of expertise						
	Universal: connecting with society in representing an expertise						
5	LEADERSHIP AND MANAGEMENT SKILLS						
	Personnel management						
	Project management						
	• Establishing priorities						
	• Short- and long-term planning						
	• Time management						
	• Establishing/maintaining effective collaborations						
	• Developing/managing budgets						
	• Tracking use of and ordering supplies and equipment						
	• Recordkeeping in print and electronic media; establishing data back-up protocols						
	• Running a meeting						
	• Delegating responsibilities						
	Leadership skills						
	• Identifying and clarifying goals						
	• Motivating/inspiring others						
	• Serving as a role model						
6	RESPONSIBLE CONDUCT OF RESEARCH						
	Data ownership and sharing						
	Research with human subjects (where applicable)						
	Research involving animals (where applicable)						
	Identifying and mitigating research misconduct						
	Conflicts of interest						